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AUTHOR Stark, Joan S.
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ABSTRACT

A group of faculty members and accrediting representatives was assembled to explore ways to better integrate liberal and professional study during the undergraduate years. The group based its discussions on educational outcomes previously identified by the project directors as important for all college-educated professionals. The project involved faculty in eight professional fields: architecture, business administration, education, engineering, journalism, nursing, pharmacy, and social work. The dialogue and dissemination activities were extremely successful in stimulating national interest about integrating liberal and professional study. The project resulted in distribution of: (1) 10,000 copies of a summary report; and (2) a self-study guide for campus use in stimulating conversation about integration of liberal and professional study, entitled "PLUSS: Professional/Liberal Undergraduate Self-Study." Appendices contain a copy of the summary report, titled "Strengthening the Ties That Bind: Integrating Undergraduate Liberal and Professional Study" (ED 304 951); a copy of the self-study guide "PLUSS"; press releases, advertisements, and letters relating to release of the report; mailing lists; workshop description; an executive summary; and a list of institutions that ordered the summary report or the self-study instrument. (JDD)

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University of Michigan
Center for the Study of Higher and Postsecondary Education
2117 School of Education
Ann Arbor, Michigan 48109-1259

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Grant No: G008541202

Project Name: SEVEN LIBERAL OUTCOMES OF PROFESSIONAL STUDY

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Project Director:

Dr. Joan S. Stark
Center for the Study of Higher and Postsecondary Education
2413 School of Education
University of Michigan
Ann Arbor, Michigan 48109-1259
(313) 936-2741

FIPSE Program Officer(s): Russell Garth, then
Thomas Carroll

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Total	299,028

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Project Name: SEVEN LIBERAL OUTCOMES OF PROFESSIONAL STUDY

Summary

A diverse group of faculty members and accrediting representatives was assembled to discuss, identify, experiment with, and disseminate ways to better integrate liberal and professional study during the undergraduate years. The group based its discussions on educational outcomes previously identified by the project directors as desirable for all college-educated professionals. To encourage others to engage in similar dialogues, the group published, publicized, and distributed a national report to place its suggestions and shared experiences before the higher education community. Subsequently, additional campuses and professional education associations have used the materials produced to develop standards and curricular options consistent with the recommendations.

Project Director:

Dr. Joan S. Stark
Center for the Study of Higher and Postsecondary Education
2413 School of Education
University of Michigan
Ann Arbor, Michigan 48109-1259
(313) 936-2741

Official* Project Reports or Products:

Strengthening the Ties That Bind: Integrating Undergraduate Liberal and Professional Study Report of the Professional Preparation Network, University of Michigan, 1988 (Joan S. Stark and Malcolm A. Lowther)

PLUSS: Professional/Liberal Undergraduate Self-Study University of Michigan, 1988. (Joan S. Stark, Malcolm A. Lowther, Bonnie M.K. Hagerty, Pamela Lokken).

* A variety of other articles and products have been produced, including those authored by participating individuals other than the project staff. For space reasons, these are listed only in the full report.

Executive Summary of Final Report

Project Title: SEVEN LIBERAL OUTCOMES OF PROFESSIONAL STUDY

Grantee Organization:

University of Michigan
Center for the Study of Higher and Postsecondary Education
2117 School of Education
Ann Arbor, Michigan 48109-1259

Project Director:

Dr. Joan S. Stark
2413 School of Education
The University of Michigan
Ann Arbor, Michigan 48109-1259
Telephone: 313-936-2741

A. Project Overview

Competent professionals are characterized by their ability to link technical knowledge with appropriate values and attitudes when making complex judgments. Although the education of most college students typically includes both liberal study and professional preparation, educators have devoted too little attention to developing the ability to integrate the two. A diverse group of faculty members and accrediting representatives was assembled to discuss, identify, experiment with, and disseminate ways to better integrate liberal and professional study during the undergraduate years. The group based its discussions on educational outcomes previously identified by the project directors as important for all college-educated professionals. To encourage others to engage in similar dialogues, the group published, publicized, and distributed a national report to place its suggestions and shared experiences before the higher education community. Subsequently, additional campuses and professional education associations have used the project materials to develop standards and curricular options consistent with the recommendations.

B. Purpose

This project was designed to stimulate ideas about ways to integrate liberal and professional education, to encourage experimentation with these ideas on a few campuses, and to disseminate the results of this venture. In contrast to many (or most) projects supported by FIPSE, the primary goal was not to seek change on the director's campus.

C. Background and Origins

Educators and the American public desire college students to be both liberal educated and well prepared to earn a living,

preferably in a professional-level job. In the mid-eighties, the tension between these two goals seemed strong. National reports published in 1984 to 1986 seemed to foster animosity and separatism, rather than collaboration, between professional and liberal arts faculty on campuses. The idea for a specific project to explore ways of integrating the two types of education grew out of a survey the project directors had conducted earlier. In this survey, professional field faculty had endorsed student educational outcomes that seemed quite similar to those endorsed by advocates of goals of liberal education.

D. Project Description

The "seven liberal outcomes of professional education" project initiated a national dialogue in which professional and liberal arts faculty shared educational practices that successfully integrate undergraduate professional and liberal studies. The network included faculty in eight professional fields: architecture, business administration, education, engineering, journalism, nursing, pharmacy and social work. The members intended to initiate change discussions on their own campuses. They also intended to foster a constructive debate, that might help reverse the unfortunate drift toward educational separatism.

E. Project Results

The dialogue and dissemination activities were extremely successful in stimulating national interest about integrating liberal and professional study. A glossy summary report of the project, entitled Strengthening the Ties That Bind: Integrating Liberal and Professional Study, was written by the project directors, aided by a working team from the network and advisory board. It was released at the 1988 National Conference on Higher Education sponsored by the American Association for Higher Education and received media coverage in the Chronicle of Higher Education. In addition to describing the project rationale and activities in some detail, the report offers challenges to academic leaders, faculty members, and external policy makers. Along with brochures describing the project, the report was distributed to presidents of all four year colleges in the United States, all professional accrediting associations, and 300 national policy makers in higher education. After the FIPSE support was concluded, the National Center for Research to Improve Postsecondary Teaching and Learning (NCRIPTAL) took over the responsibility for responding to requests for information about the project. A second printing was undertaken by NCRIPTAL at the University of Michigan for distribution at cost to those requesting it. Brochures were mailed to a mailing list of 14,000 maintained by NCRIPTAL. Two years later there is continued demand for this report. Approximately 10,000 copies have now been distributed and the report is quoted widely.

A second major product was a self-study instrument for campus use in stimulating conversation about integration of

liberal and professional study. The draft instrument, tried out by network members with varying degrees of success, was improved and printed in an attractive packet, entitled PLUSS (Professional/Liberal Undergraduate Self-Study). Flexible packaging enabled campuses to use varying numbers and sections of the instrument. Two years after the conclusion of the project, the PLUSS is still being ordered by campuses; some colleges order 100 packets.

Network members independently developed and published a book discussing their experiences. Integrating Liberal Learning and Professional Education, edited by Robert A. Armour and Barbara S. Fuhrmann, was published in the Jossey-Bass New Directions for Teaching and Learning Series (No. 40, 1989). The book of readings contains an overview by the editors, a stage-setting chapter by the project directors and eight chapters by network members from different disciplines. A variety of other articles are listed in the full report.

Numerous national workshops elicited good attendance and favorable response. These included workshops and invited addresses at the Association of American Colleges, the American Association for Higher Education, The Association for General and Liberal Studies, and the American Association of Colleges of Nursing, and others.

In fields that were involved in the network project, discussion and requests for speeches and information continues. A number of professional and occupational fields that were not involved in the network project have also explored and, in some cases, adopted materials and ideas from the project. For example, the Association for Undergraduate Public Health Administration and the Occupational Therapy Association each have incorporated some or all of the educational outcomes printed in the project reports into their membership criteria. The dissemination activities of this project also have resulted in the project director's membership on the Accounting Education Change Commission which is providing substantial grants to colleges to restructure and "liberalize" accounting education.

F. Summary and Conclusions

It is possible to undertake a national project intended to foster exchange of ideas and to deliberately achieve that end. One way to accomplish this is to involve credible and energetic individuals at national and the campus level in the discussion and activities and to disseminate an authoritative report with excellent appearance to national and campus policy makers. In order to achieve such results within a two to three year period, it is important for the project director and others involved to build upon existing contacts and dissemination channels and to include funds in the project for wide distribution of the report. Because of the slowness of diffusion of ideas in academe, it is useful to have an agency available to continue dissemination after the grant period ends.

Final Report

Project Title: SEVEN LIBERAL OUTCOMES OF PROFESSIONAL STUDY

Grantee Organization:

University of Michigan
Center for the Study of Higher and Postsecondary Education
2117 School of Education
Ann Arbor, Michigan 48109-1259

Project Director:

Dr. Joan S. Stark
2413 School of Education
The University of Michigan
Ann Arbor, Michigan 48109-1259
Telephone: 313-936-2741

A. Project Overview

A diverse group of faculty members and accrediting representatives was assembled to discuss, identify, experiment with, and disseminate ways to better integrate liberal and professional study during the undergraduate years. The group based its discussions on educational outcomes previously identified by the project directors as desirable for all college-educated professionals.

During an eighteen-month dialogue designed to foster campus and professional association concern about integration, the group identified circumstances that inhibit colleges from recognizing and accepting this responsibility. In group discussions, the group outlined qualities that characterize competent graduates in eight professional fields, and discussed how these qualities might be fostered.

To encourage others to engage in similar dialogues, the group published, publicized, and distributed a national report to place its suggestions and shared experiences before the higher education community. Subsequently, additional campuses and professional education associations have used the materials produced to develop standards and curricular options consistent with the recommendations.

B. Purpose

The purpose of this project was to stimulate ideas about ways to integrate liberal and professional education, to encourage experimentation with these ideas on a few campuses, and

to disseminate the results of this idea-generating venture. The "seven liberal outcomes of professional education" project initiated a national dialogue in which professional and liberal arts faculty shared educational practices that successfully integrate undergraduate professional and liberal studies. The network included faculty in eight professional fields: architecture, business administration, education, engineering, journalism, nursing, pharmacy and social work. The network members intended to initiate change discussions on their own campuses and to stimulate wider dialogue.

C. Background and Origins

Educators and the American public desire college students to be both liberal educated and well prepared to earn a living, preferably in a professional-level job. In the mid-eighties, the tension between these two goals seemed strong. National reports published in 1984 to 1986 seemed to foster animosity and separatism, rather than collaboration, between professional and liberal arts faculty on campuses. The idea for a specific project to explore ways of integrating the two types of education grew out of a survey the project directors had conducted earlier. In this survey, professional field faculty had endorsed student educational outcomes that seemed quite similar to those endorsed by advocates of goals of liberal education.

This project was designed to stimulate ideas about ways to integrate liberal and professional education, to encourage experimentation with these ideas on a few campuses, and to disseminate the results of this venture. In contrast to many (or most) projects supported by FIPSE, the primary goal was not to seek change on the project director's campus.

The success of the project probably was aided by its location in the Center for the Study of Higher Education at the University of Michigan. The prestige and prior record of faculty at this Center for conducting collaborative FIPSE-funded ventures (Project CHOICE, National Project IV) probably helped to solicit good national advisory board and network members from the field. Similarly, the project director's background research on professional study programs and connections with such groups as AAHE to arrange a press-conference type release for the national report were important. The project director had participated in and directed similar national group projects funded by FIPSE earlier (National Project I; Project Choice) so some of the strategies used in advertising the projects, selecting network participants etc. were well-tested. Although the project was not intended to benefit the University of Michigan directly, the University contributed portions of the time of two project directors and some graduate assistants. Thus, while the funds received from FIPSE were somewhat greater than would be expected for a single campus project, they were considerably less than expected for funding a national impact research or action project at a major university.

D. Project Description

Project goals were as follows:

1. Increase awareness among professional program and liberal arts faculty leaders about liberal educational outcomes that are important in all fields but which have received little explicit specification in educational planning.

2. Develop and test, in diverse college and university settings, a program self-study instrument of potential use in focusing attention on these liberal outcomes.

3. Engage professional program and liberal arts faculty leaders in establishing and testing new channels for information-sharing across professional study fields with respect to transferable educational activities that appear to lead to liberal outcomes of professional preparation.

The project was designed with five major activity phases: exploring, case vignettes, networking, pilot-testing, and disseminating.

Project activities included:

EXPLORING AND CASE VIGNETTES: As mentioned earlier, an extensive national survey of professional programs had been conducted prior to initiation of this project and a related comparative literature review monograph had been prepared. Project staff spent some of the early months of this project extending the data analysis of the survey and putting the finishing touches on the monograph published in the ASHE/ERIC Higher Education Report Series, and entitled Responsive Professional Education: Balancing Outcomes and Opportunities. Both of these projects provided important background to the staff and supplied credibility for formation of the National Advisory Board and network. Subsequently, Project staff conducted interviews with faculty in professional programs who had responded to the prior survey in order to identify 1) specific educational activities believed to promote liberal learning, and 2) to identify successful innovations in integrating liberal and professional study. The assumption behind this process, which proved true, was that many professional programs are already concerned with liberal education and have devised varied ways of ensuring that professional students encounter appropriate educational activities. We assumed that what was learned in one setting would be useful in others. The interviews were used to form case vignettes that stimulated discussion at the later network meetings. They were also used to help understand the assumptions of each of the various professional fields in order to establish groups that would have challenging and productive discussions.

NETWORKING AND PILOT-TESTING: A national advisory board was established of prominent leaders from eight professional fields, the liberal arts, and accrediting organizations. Our assumption here was that this board would add credibility to attract suitable participants to the network. Equally important, they would be able to advise us regarding the nuances in the different fields and their advance discussions would warn of cautions in conducting the network discussions. This proved true. We learned, for example, that the humanistic professional fields (nursing, social work, education) tend to proceed into group discussions cautiously and with great concern for personal feelings and opportunity for all to participate. In contrast, the scientific and enterprising professional fields (business, engineering, architecture) are more likely to believe that conflict eventually produces the best thinking-- they lay all their strong feelings on the table immediately and expect others will not take offense. This understanding helped us structure the discussions and to develop some advice for those attempting to foster cross-discipline discussions on campuses.

Through applications, members were selected for a network of undergraduate professional program faculty and liberal arts colleagues from the same campuses to discuss integration of liberal learning with professional study. Eight fields typically taught as four to six-year undergraduate professional study were included: architecture, business, education, engineering, journalism, nursing, pharmacy, social work. The liberal arts faculty members from these same campuses taught in many fields from English to psychology; some were deans or department chairpersons. Three network meetings were held that included these representatives, the advisory board, and invited accrediting representatives from the various professions. We did our best to select teams that had strong potential for influence on their own campuses, based on the participants' positions and previous involvement in integrating liberal and professional study. We also attempted to select a mix of large and small colleges with varied missions. In some fields we had a wide range of applicants and we could have made many excellent choices. In others, business, for example, we had few applicants and yet we chose two business settings, one of which turned out to be an ineffective team. We did not provide any funds to the campuses for the projects. Rather we expected them to pay the transportation of their members to meetings and we paid on-site costs. These commitments were carried through for all but two of the selected colleges.

The network spent considerable time discussing and generally agreeing on (with some minor exceptions) a list of educational outcomes that indicate a liberally educated professional. The result was expansion of the list of liberal/professional outcomes from seven to ten and accompanying modification of the title of the project in subsequent bulletins. The first network meeting was extremely difficult. We were engaged in a new and potentially threatening discussion with people who did not know each other

or, at that time, respect each others views. One of our goals, of course, was to see if it was possible to develop that respect. We learned that in such a first meeting with a group of faculty members, it is important to pause, take stock, give people a chance to vent their feelings, and allow them to take some responsibility for the next steps. Because we did this, the second and third meetings of the group went smoothly. In fact, a great deal of "bonding" of the group was evident by the final network meeting. Although we could probably develop a list of dos and don'ts with sensitive discussion from this, we suspect that one simply has to adapt to each new situation. We do believe that information gathered in our prior survey which helped us understand that the general educational paradigms espoused by the different fields were different, was of assistance in structuring the discussions. In contrast, perhaps we should have chosen all large colleges since the wide disparities in institutional size represented by network institutions sometimes caused discussions to bog down. Our decision to invite the president of COPA to sit on the advisory board and the accrediting agencies to attend network meetings (although they were obliged to pay their own costs of participation) was a wise one and diffused possible defensiveness to our work.

The project staff developed a campus self-study instrument to facilitate efforts to integrate professional and liberal learning outcomes. Some network members tried various ways of using this instrument on their campuses. From this project we learned primarily that more careful monitoring of a pilot study activity using a draft instrument is important. Despite discussion that the survey-type draft PLUSS should be used in small group meetings to foster discussion, some of the network members simply sent it out to faculty members on their campus. Without discussion of the purpose, such a survey fell flat and was deemed unsuccessful. Those who used it, as suggested, in small group discussions had better success.

DISSEMINATING: Information about the dialogue was disseminated at various national meetings for higher education leaders, and, in particular, for professional field faculty in the participating fields and other undergraduate fields not directly involved. Dissemination was carried out by both project staff and network members. A particular difficulty we encountered here relates to necessary timelines and calendars for projects of this sort. A full 12 months advance time is needed to submit conference presentation to these various associations, many of which have requirements that only members may schedule or submit presentations. Thus, unless it is possible to know at the outset what to propose as a presentation, a project of less than two years duration is bound to have difficulty in using this mode of dissemination.

Information about the dialogue was disseminated in various higher education and professional association newsletters. Here, as for conferences, dissemination was carried out by both project staff and network members. Project staff distributed press

releases to home-town newspapers and appropriate professional associations documenting the activity of the network participants.

The project staff and network members wrote articles were written about the project and its work. These included both technical research articles about the interviews and surveys conducted prior to establishing the network and non-technical articles about the work of the network itself.

On each of the network campuses, some attempts were made to stimulate discussions about integration of liberal and professional study. On a few campuses attempts were made to develop indicators for assessing the effect of integration. The way the project was set up, without any fiscal support from FIPSE for the campuses, we had no authority to command the campuses to undertake any particular aspect of the project. We tried to use persuasion and a sense of experimentation to encourage work with indicators. In many cases, other, more general curricular change projects that were underway enhanced, or were enhanced by, this project. In at least one case, however, the network members efforts were set aside as creating an agenda overload a complex change effort already underway. We used persuasion, and a sense of excitement about experimentation to encourage work with assessment indicators. In a final attempt to stimulate more of our network members, we invited nationally known figures working in the area of assessment (Pat Hutchings of AAHE and Tom Moran of SUNY- Plattsburg) as speakers. Because these talks tended to attribute the initiation of assessment to state and national level policy-makers, they probably had the effect of generating resistance rather than eagerness to experiment with assessment indicators.

The project period was originally 18 months, later extended to two years as a no-cost extension. In retrospect, to achieve the hoped for discussions of assessment indicators, this should have been designed as a three year project. Furthermore, it should have included sufficient funds for the project staff to make campus visits to a selected subset of the network institutions and a fourth network meeting which included top administrators from a subset of the institutions. Such a plan would have allowed us to work with the network for a time, then identify a few institutions ready to move their on-campus projects rapidly along, and provide technical assistance just to those campuses. We doubt, however, whether a larger budget would have been approved by FIPSE.

E. Project Results

Although the exploring and case vignettes activities in the first year of the project were essential, "behind the scenes" groundwork necessary for success, the networking and disseminating phases of the activity were by far the most visible success.

The dialogue and dissemination activities were extremely successful in stimulating national interest about integrating liberal and professional study. This interest continues to be strong. On a "micro" level as well, most of the 50 participants in the network were effusive about new dimensions their academic lives took on as a result of this collegial interchange across discipline boundaries. These new linkages continue to be strong among the network members as they worked beyond the end of the project on such projects as an edited volume reporting their experiences.

A attractive summary report of the project, entitled Strengthening the Ties That Bind: Integrating Liberal and Professional Study, was written by the project directors, aided by a working team from the network and advisory board. It was released at the 1988 National Conference on Higher Education sponsored by the American Association for Higher Education and received media coverage in the Chronicle of Higher Education. In addition to describing the project rationale and activities in some detail, the report offers challenges to academic leaders, faculty members, and external policy makers. Along with brochures describing the project, the report was distributed to presidents of all four year colleges in the United States, all professional accrediting associations, and 300 national policy makers in higher education. After the FIPSE support was concluded, the National Center for Research to Improve Postsecondary Teaching and Learning (NCRIPTAL) took over the responsibility for responding to requests for information about the project. A second printing was undertaken by NCRIPTAL at the University of Michigan for distribution at cost to those requesting it. Brochures were mailed to a mailing list of 14,000 maintained by NCRIPTAL. Two years later there is continued demand for this report. Approximately 10,000 copies have now been distributed and the report is quoted widely.

Originally, a national dissemination conference was scheduled in the grant plans. Later, either a conference or a report were in the plans. In consultation with the Advisory Panel and our FIPSE Program Officer, we decided on using the funds for the report. We believe now that this was a wise decision. By now, the conference would have been only a dim memory. In contrast, some colleges only now discovering the project can obtain and use the report. Partly as a result of this experience, we have come to feel that there are too many competing special purpose conferences in higher education today that accomplish too little. Finally, we should mention that it was a wise decision to ask Frank Rhodes, President of Cornell University and, at that time, of of the American Council on Education to add a prestigious foreword to the report.

A second resulting product was a self-study instrument for campus use in stimulating conversation about integration of liberal and professional study. The draft instrument, tried out by network members with varying degrees of success, was improved and printed in an attractive packet, entitled PLUSS

(Professional/Liberal Undergraduate Self-Study). Flexible packaging enabled campuses to use varying numbers and sections of the instrument. Two years after the conclusion of the project, the PLUSS is still being ordered by campuses; some colleges order 100 packets.

Several processes and projects emerging from the network activities proved successful and now have been used in other settings. In particular, we note the process of "micro-participation" in which faculty members teach a short lesson in their field to other faculty members from different fields. The micro-lesson is followed by a discussion of paradigm differences and teaching approaches. A second process, less fully developed as yet but which will receive more attention in the near future is the "collaboration-integration" matrix which can be used for more general discussions about curricular change on campuses. It seems particularly adaptable to thinking about core curricula.

Network members independently developed and published a book about their experiences. Integrating Liberal Learning and Professional Education, edited by Robert A. Armour and Barbara S. Fuhrmann, was published in the Jossey-Bass New Directions for Teaching and Learning Series (No. 40, 1989). The book of readings contains an overview by the editors, a stage-setting chapter by the project directors and eight chapters by network members from different fields. A variety of other papers were published by the project staff either just before, during or after the project as listed below:

Responsive Professional Education: Balancing Outcomes and Opportunities ASHE/ERIC Higher Education Reports, 1986.

"A Conceptual Framework for the Study of Pre-Service Professional Programs in Colleges and Universities." Journal of Higher Education, 1987.

"Faculty Roles and Role Preferences in Ten Fields of Professional Study." Research in Higher Education, 1986.

"Faculty and Administrator Views of Influences on Professional Programs." Research in Higher Education, 1987.

Review of Contesting the Boundaries of Liberal and Professional Education (Peter Marsh, Editor) Journal of Higher Eeducation, 1989.

"Liberal Education and Professional Programs: Conflict, Coexistences or Compatibility." In Mary Ann Rehnke, Ed.. Selecting Career Programs for College Campuses. Jossey Bass, 1987.

"Comparing Educational Accreditation Standards in Selected Professional Fields." JOurnal of Higher Education 1989

Numerous national workshops elicited good attendance and favorable response. This included workshops and invited addresses at the Association of American Colleges, the American Association for Higher Education, The Association for General and Liberal Studies, and the American Association of Colleges of Nursing, and others.

In fields that were involved in the network project, discussion and requests for speeches and information continues. A number of professional and occupational fields that were not involved in the network project have also explored and, in some cases, adopted materials and ideas from the project. For example, the Association for Undergraduate Public Health Administration and the Occupational Therapy Association each have incorporated some or all of the educational outcomes printed in the project reports into their membership criteria. The dissemination activities of this project also have resulted in the project director's membership on the Accounting Education Change Commission which is providing substantial grants to colleges to restructure and "liberalize" accounting education.

Finally, the project has now spawned at least four known dissertation studies by students at universities in all parts of the country who are applying the ideas and frameworks to different professional study fields. Here at the University of Michigan, a dissertation applying the concepts developed in the network to the field of professional practice examined nurses' use of liberal education in their work settings. This dissertation, by Project Associate Bonnie Hagerty has won the "best dissertation in education" award at Michigan and is a competitor in national dissertation awards processes. The inventory created for the dissertation is adaptable for use in the other professional fields, a project we hope to start soon.

The "pilot study" phase of the work was not as successful. At the worst extreme, representatives at two campuses chosen to participate did not persist. In one case, the network members simply did not continue; in another case, to avoid disruption in the project, we asked a participating team not to continue. At best, we understand that several of the campuses have continued to make successful strides toward integrating liberal and professional study. We note, for example, that the volume the group published independently in 1989 includes several success stories. The project period simply was too short to correctly assess the momentum that began as a result of the discussions.

In between these two extremes of dropping out and having excellent success on a delayed basis, the network participants made strides toward integration to varying degrees. Some tried out the PLUSS successfully and some unsuccessfully. These efforts helped us improve the instrument. Some were able to write brief case studies of the efforts on their campus; others declined to do so or had only modest change to report at the time project ended. Only one or two of the campuses really got to the point of trying to identify indicators of success in

integration. Nonetheless, the understandings gained from the attempt on each of the campuses contributed a great deal to the types of suggestions we passed on to others in Strengthening the Ties that Bind... As an experiment from which many learned as observers, the on-campus pilot studies were very fruitful; as projects on each campus, they were not sweeping successes.

We note that our original proposal contained a detailed and appropriate evaluation plan to be conducted by an independent agency, Formative Evaluation Research Associates of Ann Arbor. In the budget negotiations, FIPSE deemed this evaluation too expensive and urged us to use simple means such as a committee of the National Advisory Panel. Consequently, with involvement of the Panel, we developed simple questionnaires on which the network participants report their satisfaction and extent of learning from each of the general meetings. We also developed interview protocols to keep track of the on-campus projects by telephone. The results were quite positive and the positive feeling increased as the project progressed. We did not attempt to formally evaluate the efforts toward integration on each individual campus since, without funding, the campuses had no firm obligation to change.

Although we particularly regretted the loss of funding to do a systematic follow-up of the national dissemination effort, the anecdotal records we have kept of the wide dispersion of the ideas, some examples of which are reported above, speak quite adequately to success of this effort. To summarize, we list below four long-range goals included in our original plans. We can clearly document that the first two have been achieved. The third and fourth goals are less easy to document although it would be possible to do so, for example, by contacting campuses that ordered project materials.

1. Increase discussion among professional faculty in diverse programs about specification and achievement of liberal outcomes.

2. Increase discussion among professional faculties and liberal arts faculties about combining liberal and professional study.

3. Encourage adoption of more clearly specified educational activities leading to liberal outcomes of professional study.

4. Attempt to provide pilot documentation studies of liberal outcomes of professional study.

It is important to note that because the original final report (submitted within 90 days after the end of the project) was rejected as not being in the correct form, this substitute commentary is being written nearly two years after the project end. At this point, we have a view of the very substantial impact of this project that would not have been possible at the time the original report was filed. We think this should tell FIPSE that, for national idea-generating and dissemination

projects of this type, reserving some small amount of funds for evaluation two to five years later may make good sense. To document the interest in the project at this point, we can show a large number of complimentary letters, including a governor, a state senator, a foundation executive, college presidents and deans, and many others. We have attached to this report (Appendix G) a updated list of colleges known to have ordered project products beyond the complimentary ones they received.

F. Summary and Conclusions

It is possible to undertake a national project deliberately intended to foster exchange of ideas and to successfully achieve that end. One way to accomplish this is to involve credible and energetic individuals at national and the campus level in the discussion and dissemination activities and to disseminate an authoritative report with excellent appearance to national and campus policy makers. In order to achieve such results within a two to three year period, it is important for the project director and others involved to build upon existing contacts and dissemination channels and to include funds in the project for wide distribution of the report. Because the diffusion of ideas in the academic world is slow, such a project is best evaluated after considerable time has passed.

Unlike projects that primarily benefit the home institution, the project directors originally had no particular plans to continue this work. Rather, every attempt was made to cultivate leadership activities among the members of the network so that the momentum would be sustained while the directors moved on to other projects. However, given the continuing impact of the project, and the constant receipt of invitations (at least one a week) to speak on campuses or to associations concerning the project, it seems difficult to disassociate. We would have to rate this project as having the most positive reception of any we have ever undertaken.

In order to document our work further, we had sought and obtained a contract for a book from Jossey-Bass. In the end we declined the contract because of a lack of congruence between Jossey-Bass vision (or promotional needs) and our scholarly view of what should be written. In fact, probably the best of what needed to get written did get out to the world in the edited book done by the network members. That is as it should be and shows that the project has been picked up by others as intended. The project directors see their role as stimulating thinking and innovation in higher education. We have moved on to other projects and studies. Perhaps, however, following the doctoral dissertation of our project associate, one of our next tasks will be to help faculty in these same eight professional fields examine whether the liberal education outcomes are used in professional practice.

G. Appendices (Previously submitted in multiple copies on two occasions). Only an update of Appendix G is attached here.

Appendix A. Strengthening the Ties That Bind: Integrating Undergraduate Liberal and Professional Study Report of the Professional Preparation Network, University of Michigan, 1988 (Joan S. Stark and Malcolm A. Lowther)

Appendix B. PLUSS: Professional/Liberal Undergraduate Self-Study University of Michigan, 1988. (Joan S. Stark, Malcolm A. Lowther, Bonnie M.K. Hagerty, Pamela Lokken).

Appendix C: Press releases, letters, etc.

Appendix D: Mailing lists and detail

Appendix E: Workshop description

Appendix F: Executive Summary

Appendix G: Institutions that have ordered Strengthening the Ties that Bind or PLUSS (updated 3/20/90).

Appendix G:

Institutions that have ordered
Strengthening the Ties That Bind or PLUSS
(updated 3/20/90)

Total PPP orders by institution-June thru October 1988

Organiz	trengthen	Tie	PLUSS	Review
No. of orders placed by individuals		38		14
Abilene Christian University		3		0
Academy of the New Church		1		0
Adelphi University		2		0
Adelphia University		1		1
Alabama Commission on Higher Education		1		0
Albany College of Pharmacy		1		0
Albany State College		1		1
Alberta Advanced Education Library		1		0
Albion College		9		9
Alfred University		1		0
Allegheny College		1		0
Alma College		4		3
American Assem. of Collegiate Schools of Bus		18		0
American Council on Education		1		0
American Occupational Therapy Assoc., Inc.		1		0
American University		3		1
Andrew W. Mellon Foundation		1		0
Andrews University		6		7
Aquinas College		1		0
Arizona Board of Regents		1		1
Arizona State University		3		0
Arkansas State University		2		2
Arkia, Inc.		1		1
Art Play		2		0
Assoc. of Univ. Programs in Health Admin.		7		7
Assumption College		1		0
Atlantic Union College		1		0
Augsburg College		1		0
Augusta College		7		6
Augustana & Sioux Falls Colleges		1		1
Augustana College		1		1
Aurora University		1		0
Austin Peay State University		2		2
Babcock Graduate School of Management		1		0
Babson College		1		0
Baker Univ. School of Prof. & Grad. Studies		1		0
Baldwin-Wallace College		1		1
Ball State Bookstore		1		1
Ball State University		10		2
Barry University		3		2
Baruch College		1		1
Baylor Univ. School of Nursing		1		1
Beaver College		1		1
Bellevue College		0		1
Belmont College		2		1
Bentley College		3		0
Berklee College of Music		2		0
Birmingham-Southern College		1		0
Bishop Clarkson College		1		1
Blackwell North America, Inc.		1		0
Bloomfield College		1		0
Book House, Inc.		1		0

Total PPP orders by institution-June thru October 1988

Organiz	trengthen	Tie	PLUSS	Review
Boricua College		1		0
Boston College		1		0
Boston University		5		2
Boston University School of Medicine		1		0
Bowling Green State University		13		0
Bradley University		2		0
Bridgewater State College		1		1
Brigham Young University		1		1
Brooklyn College		1		0
Bucknell University		3		2
Bucks County Community College		1		0
Butler University		2		0
California Lutheran University		1		0
California Polytechnic State University		2		0
California Postsecondary Education Commissi		1		0
California State College, Bakersfield		1		1
California State Polytechnic University		28		14
California State University, Bakersfield		1		1
California State University, Chico		9		1
California State University, Fresno		1		0
California State University, Fullerton		4		2
California State University, Long Beach		1		0
California State University, Los Angeles		5		0
California State University, Northridge		2		0
California State University, Sacramento		2		0
California State University, San Bernardino		0		1
California State University, Stanislaus		1		1
California University of Pennsylvania		3		1
Calvin College		1		1
Canisius College		1		0
Capital University		1		1
Cardinal Stritch College		0		1
Carlson School of Management		1		0
Case Western Reserve University		1		0
Catholic Medical Center of Brooklyn & Queens		1		0
Catonsville Community College		1		1
Cedarville College		1		0
Centenary College		2		1
Central Connecticut State University		1		2
Central Michigan University		2		0
Central Missouri State University		2		0
Centre d'Animation de Developement et de Re		1		0
Cerritos College		1		1
Chippewa Valley Technical College		1		0
Christian Brothers College		1		0
Clarke College		1		0
Clemson University		1		0
Cleveland State University		2		0
College Entrance Examination Board		1		0
College of Charleston		1		0
College of Great Falls		1		0
College of New Rochelle		1		0
College of Saint Rose		1		1

Total PPP orders by institution-June thru October 1988

Organiz	trengthen	Tie	PLUSS	Review
College of St. Catherine		1		0
College of St. Francis		1		0
College of St. Thomas		6		1
College of Staten Island		1		1
Colorado School of Mines		2		2
Colorado State University		1		0
Columbus State Community College		1		1
Commonwealth of Massachusetts		1		0
Community College of Philadelphia		2		1
Concordia College		1		1
Connolly & Associates		0		1
Cornell University		13		10
Council for Higher Education of Virginia		1		0
Cumberland College		1		0
Cuyahoga Community College		1		0
Dalhousie University		1		0
Dartmouth College		2		1
Davenport College		1		0
David Lipscomb University		1		0
Delgado Community College		1		0
DePaul University		1		0
Doane College		0		1
Dordt College		0		1
Dowling College		1		0
Drexel University		2		1
Drury College		4		2
Duquesne University		1		1
E. W. Scripps School of Journalism		1		0
East Carolina University		2		2
East Texas Baptist University		1		1
Eastern Connecticut State University		3		2
Eastern Michigan University		3		0
Eastern Washington University		2		1
Edgewood College		1		0
Edinboro University of Pennsylvania		2		1
Educational Testing Service, Atlanta Office		2		2
Elizabethtown College		2		1
Elmhurst College		3		0
Elms College		1		0
Emory School of Nursing		1		0
Empire State College		1		0
Emporia State University		1		0
Essex Community College		1		0
Eureka College		1		0
Evergreen State College		15		0
Fairleigh Dickinson University		1		1
Ferris State College Bookstore		1		0
Ferris State University		1		1
Field Museum of Natural History		1		0
First Baptist Seminary College & Seminary		1		1
Five Towns College		1		0
Florida Atlantic University		1		0
Florida Community College at Jacksonville		1		1

Total PPP orders by institution-June thru October 1988

Organiz	trengthen	Tie	PLUSS	Review
Florida State University		1		0
Gallaudet University		1		0
Gannett Foundation		1		0
Gannon University		3		2
Gardner-Webb College		1		0
General Board of Higher Education and Ministr		1		1
George Mason University		2		1
Georgia College		1		0
Georgia Institute of Technology		0		1
Georgia Southern College		1		0
Georgia State University		2		1
Glendale Community College		1		1
Golden Gate University		1		0
Goshen College		1		0
Goucher College		1		0
Graceland College		2		0
Grambling State University		2		0
Grand Valley State University		3		1
Green Mountain College		1		0
Greenfield Community College		1		1
Gustavus Adolphus College		2		0
Hamline University Bookstore		1		0
Hampton University		1		1
Hanover College		1		1
Harrington Institute		1		1
Hartford College for Women		1		1
Hartwick College		1		1
Harvard Business School		1		0
Harvey Mudd College		1		0
Hawaii Loa College		1		0
High Point College		1		0
Hope-Calvin Dept. of Nursing		1		1
Humboldt State University		1		0
Hunter College		1		0
Idaho State University		15		1
Illinois Institute of Technology		1		2
Illinois State University		2		0
Illinois Wesleyan University		1		0
Indiana State University		1		1
Indiana University at South Bend		1		1
Indiana University Bloomington		2		0
Indiana University of Pennsylvania		1		0
Indiana University-Purdue Univ. at Ft. Wayne		1		0
Indiana University-Purdue Univ. at Indianapol		3		0
Inter Faculty Organization		1		1
Iona College		2		0
Iowa State University		5		5
Jackson Community College		6		0
James Madison University		3		1
Johns Hopkins University		1		1
Johnson County Community College		1		0
Kankakee Community College		1		0
Kansas State University		2		1

Total PPP orders by institution-June thru October 1988

Organiz	trengthen	Tie	PLUSS	Review
Kennesaw College		18		1
Kentucky State University		1		0
Keuka College		1		1
King's College		102		0
Kutztown University		1		0
La Roche College		31		5
La Salle University		2		1
Lafayette College		1		0
Lakeland College		1		1
Lander College		6		1
Lansing Community College		1		1
Lebanon Valley College		2		2
Lehigh University		1		1
LeMoyne College		1		0
Lesley College		5		0
Lewis & Clark College		2		0
Librarie de l'Universite de Montreal		1		0
Library of Congress		2		0
Lincoln University		4		2
Lincoln University College		1		0
Lindenwood College		1		0
Linfield College		8		0
Loma Linda University		1		0
Long Island University		2		0
Louisiana State University		3		1
Louisiana Tech University		1		0
Loyola University of Chicago		1		0
Loyola University-New Orleans		1		1
Luther College		1		0
Lycoming College		1		1
Lynchburg College		5		3
Madonna College		3		0
Malone College		2		0
Management Communications		1		1
Manchester College		1		0
Manhattan College		2		0
Mankato State University		1		0
Marian College		2		2
Marian College of Fond du Lac		1		1
Marquette University		2		1
Marycrest College		1		1
Marygrove College Library		1		0
Marymount College		2		0
Marywood College		1		1
Massachusetts Institute of Technology		1		0
Medgar Evers College		1		0
Memphis State University		3		2
Mercy College of Detroit		7		1
Mercy Medical Center		0		1
Metropolitan State College		1		1
MGH Institute of Health Professions		1		0
Miami University		6		1
Michigan Nurses Association		1		0

Total PPP orders by institution-June thru October 1988

Organiz	trengthen	Tie	PLUSS	Review
Michigan State University		2		1
Microelectronics Information Center		1		0
Middle Tennessee State University		1		1
Midway College, Inc.		1		1
Midwest Library Service		1		1
Millersville University		2		1
Millikin University		1		1
Millsaps College		1		0
Ministry of Colleges and Universities		2		0
Minnesota State University System		1		0
Mississippi State University		1		0
Missouri Southern State College		1		0
Missouri Western State College		1		0
Mitchell College of Advanced Education		1		0
Modern Language Assoc. of America		1		0
Monmouth College		2		1
Montana State University		1		0
Montclair State College		2		2
Mount Mercy College		2		1
Mount Vernon Nazarene College		1		0
Mt. Carmel Health Distribution Center		1		0
Mt. Vernon College		6		1
Muhlenberg College		2		0
National Board for Prof. Teaching Standards		1		0
National College of Education		1		0
National Institute for Educational Research		1		0
National Institute of Higher Education		1		0
National Science Foundation		1		0
Nazareth College		24		0
Nazareth College of Rochester		2		0
NCNIP		1		0
New England Institute of Technology		2		2
New Mexico State University		2		1
New York University		1		1
North Carolina Wesleyan College		6		1
North Central College		1		0
North Central Regional Educational Laboratory		1		0
North Dakota State University		1		0
North Iowa Area Community College		1		1
Northeast Missouri State University		1		0
Northeast Wisconsin Technical College		1		1
Northeastern Illinois University		1		1
Northeastern University		1		1
Northern Arizona University		2		0
Northern Illinois University		3		0
Northwest Missouri State University		1		0
Northwest Nazarene College		2		0
Northwestern College		1		1
Northwestern University		3		0
Nova University		2		2
Oak Ridge Associated Universities		1		0
Oakton Community College		2		2
Oberlin College		1		1

Total PPP orders by institution-June thru October 1988

Organiz	trengthen	Tie	PLUSS	Review
Office of the Prime Minister of Canada		1		0
Ohio State University		13		1
Ohio University		1		0
Ohio University Library		1		0
Ohio Wesleyan University		2		0
Old Dominion University		2		0
Ontario Corporation		1		0
Ouachita Baptist University		1		0
Pace University		1		1
Pacific Lutheran University		3		0
Pacific University		1		0
Paul Smith's College		1		1
Paul Smith's College of Arts & Sciences		1		1
Peabody Institute		1		0
Peat Marwick Main & Co.		1		0
Penn State - Harrisburg		2		0
Penn Valley Community College		1		1
Pennsylvania State University		27		4
Peru State College		2		1
Philadelphia College of Textiles & Science		2		0
Philadelphia College of the Arts		1		0
Piedmont Community College		1		1
Pittsburg State University		2		1
Purdue University		3		1
Purdue University Libraries		2		0
Queens College		1		1
Regis College		1		1
Revelle College		1		1
Rhode Island College		14		2
Robert Morris College		8		0
Rockford College		1		1
Rockland Community College		1		1
Roger Williams College		1		0
Rollins College		1		1
Roosevelt University		1		0
Roxbury Community College		1		1
Rural Education Researchers		1		0
Russell Sage College Library		1		0
Rutgers - The State University		3		1
Rutgers University		2		1
Saginaw Valley State University		1		1
Saint Joseph College		1		1
Saint Mary-of-the-Woods College		1		0
Saint Peter's College		1		0
Salem State College		1		0
Salisbury State University		1		1
Salt Lake Community College		1		0
Samford University Bookstore		1		1
Samford University Library		2		2
San Diego Community College District		1		0
San Diego State University		3		2
San Diego State University Foundation		1		0
San Francisco State University		1		0

Total PPP orders by institution-June thru October 1988

Organiz	trengthen	Tie	PLUSS	Review
San Jose City College		1		1
Santa Clara University		1		0
Sargent College		1		0
Scholarly Book Center, Inc.		1		0
Seattle University		1		0
Seton Hall University		2		0
Shenandoah College		0		1
Simmons College		2		0
Simon Fraser University		1		0
SIUE Supporting Services		2		0
Slippery Rock University		1		0
Social Science Education Consortium, Inc.		1		1
South Dakota State University		2		0
Southeast Missouri State University		3		3
Southern College		1		1
Southern Connecticut State University		1		0
Southern Illinois University at Carbondale		2		1
Southern Illinois University at Edwardsville		17		12
Southern Methodist University		7		3
Southern Regional Education Board		7		0
Southwest Baptist University		2		2
Southwest Missouri State University		1		0
Southwest Texas State University		1		0
Southwestern Oklahoma State University		1		0
Spaulding University		1		1
Spelman College		1		1
St. Ambrose University		1		0
St. Bonaventure University		1		0
St. Cloud State University		1		1
St. Francis College		2		2
St. Joseph Medical Center		3		3
St. Joseph's College		0		4
St. Joseph's Hospital		1		1
St. Louis College of Pharmacy		1		0
St. Mary's College		3		0
St. Michael's College		1		0
St. Norbert College		1		0
State of Indiana Commission for Higher Ed.		1		0
State of Missouri		1		0
Stetson University		1		0
Stonehill College		1		0
SUNY at Binghamton		1		0
SUNY College at Brockport		3		2
SUNY College at Buffalo		1		0
SUNY College at Cortland		4		0
SUNY College at Fredonia		1		0
SUNY College at New Paltz		4		2
SUNY College at Oneonta		2		0
SUNY College at Plattsburgh		3		1
SUNY College at Potsdam		1		0
SUNY College of Technology at Farmingdale		1		1
SUNY Health Science Center at Syracuse		1		1
Susquehanna University		1		0

Total PPP orders by institution-June thru October 1988

Organiz	trengthen	Tie	PLUSS	Review
Syracuse University		2		2
Syracuse University Bookstores		2		0
Teachers College Columbia University		1		0
Temple University		2		1
Tennessee Technological University		2		1
Texas A & M University		2		0
Texas Tech University		3		1
Texas Woman's University		1		1
The Book House, Inc.		2		0
The Carnegie Found. for the Advmnt. of Tchg.		1		0
The Claremont Colleges		1		0
The Millbury-Sutton Chronicle		1		0
The Skidmore Shop		1		0
Thomas Jefferson University		2		0
Towson State University		1		0
Trenton State College		86		1
Trinity University		6		1
Triton College		1		1
Tusculum College		1		1
Tuskegee University		1		1
U.S. Dept. of Education		1		1
Union College		1		0
Union Memorial Hospital		1		0
Union of Experimenting College & Universities		1		0
Univ. of Medicine and Dentistry of New Jersey		3		2
Université de Montréal		2		1
Universite du Quebec a Montreal		1		0
University College		1		1
University Council for Ed. Admin.		1		0
University of Alabama at Birmingham		1		0
University of Alaska, Fairbanks		1		0
University of Alaska, Southeast		2		0
University of Arkansas		1		0
University of British Columbia		1		0
University of California, Berkeley		3		1
University of California, Los Angeles		1		1
University of California, San Diego		1		0
University of California, Santa Barbara		1		1
University of California, Santa Cruz		1		0
University of Cincinnati		5		1
University of Colorado, Boulder		6		1
University of Colorado, Denver		1		0
University of Dayton		4		4
University of Evansville		4		2
University of Florida		2		0
University of Guelph		1		0
University of Hartford		1		0
University of Hawaii		3		0
University of Houston-Clear Lake		6		0
University of Illinois at Urbana-Champaign		4		1
University of Illinois/Urbana-Champaign		1		0
University of Indianapolis		1		1
University of Kansas		3		0

Total PPP orders by institution-June thru October 1988

Organiz	trengthen	Tie	PLUSS	Review
University of Kentucky		2		0
University of LaVerne		1		0
University of Louisville		1		0
University of Lowell		18		8
University of Maine		2		1
University of Maine at Augusta		1		0
University of Maine System		2		0
University of Manitoba		1		0
University of Maryland		6		3
University of Massachusetts - Boston		2		0
University of Miami		3		3
University of Michigan		6		1
University of Michigan-Dearborn		1		0
University of Minnesota, Duluth		8		1
University of Minnesota, Twin Cities		3		2
University of Mississippi Medical Center		1		0
University of Missouri-Columbia		1		1
University of Missouri-Kansas City		2		1
University of Missouri-Rolla		1		0
University of Missouri-St. Louis		1		0
University of Montana		1		1
University of Montevallo		1		0
University of Nebraska at Lincoln		12		9
University of Nevada-Reno		5		2
University of North Carolina at Chapel Hill		5		3
University of North Carolina at Greensboro		10		10
University of North Dakota		6		2
University of Northern Iowa		1		1
University of Oklahoma		1		0
University of Oregon		1		0
University of Pennsylvania		2		0
University of Pittsburgh		4		2
University of Portland		1		1
University of Puerto Rico		101		101
University of Puget Sound		2		2
University of Redlands		4		0
University of Rhode Island		3		0
University of Richmond		2		1
University of Rochester		3		1
University of San Francisco		41		20
University of Science & Arts of Oklahoma		1		0
University of South Carolina		1		0
University of South Carolina at Aiken		1		0
University of South Carolina at Spartanburg		1		0
University of South Florida		3		0
University of Southern California		2		1
University of Southern Mississippi		2		1
University of Southwestern Louisiana		1		0
University of Tennessee		1		0
University of Texas at Austin		2		0
University of Texas at El Paso		1		0
University of Vermont		2		1
University of Virginia		3		2

Total PPP orders by institution-June thru October 1988

Organiz	Strengthen	Tie	PLUSS	Review
University of Washington		1		0
University of Wisconsin-Eau Claire		7		3
University of Wisconsin-Green Bay		2		0
University of Wisconsin-Madison		2		0
University of Wisconsin-Oshkosh		13		1
University of Wisconsin-Parkside		1		1
University of Wisconsin-Platteville		0		2
University of Wisconsin-River Falls		0		1
University of Wisconsin-Stevens Point		6		1
University of Wisconsin-Superior		1		0
University of Wisconsin-Whitewater		1		1
University of Wyoming		5		0
Utah State University		3		2
Valparaiso University Assoc., Inc.		1		1
Vanderbilt University		1		1
Vassar College		1		0
Vermont State Colleges		1		1
Versalius College		1		0
Villanova University		1		0
Virginia Military Institute		1		0
Virginia Polytechnic Inst. and State Univ.		2		0
Wake Forest University		1		0
Walla Walla College		1		0
Walters State Community College		1		0
Washington and Jefferson College		1		0
Washington University		2		0
Wayne State College		1		0
Wayne State University		1		0
Webster University		1		2
Wells College		1		0
West Virginia University Book Stores		1		0
Western Carolina University		1		0
Western Illinois University		1		1
Western Kentucky University		1		0
Western Michigan University		5		0
Western New England College		1		1
Western State College		1		0
Western Washington University		2		0
Wheaton College		1		1
Wheelock College		14		3
Wichita State University		8		0
Wilkes College		10		0
William Paterson College		1		1
Wilmington College of Ohio		1		0
Winona State University		1		0
Wintrhop College		1		0
Wisconsin Dept. of Public Instruction		1		0
Woodbury University		1		1
Woodrow Wilson National Fellowship Found.		1		0
Wright State University		1		1
Yavapai College		1		1
York University		2		0
Youngstown State University		1		0

Total PPP orders by institution-Nov 1988 thru Mar 20, 1990

Organiz	Ties	PLUSS
No. of orders placed by individuals	26	1
A.I.G.A.	1	0
Abilene Christian University	1	1
Abington Memorial Hospital	1	0
Academic Book Center, Inc.	1	0
Acquinas Junior College	1	1
Adrian College	1	0
Air University Library	1	0
Albany College of Pharmacy	1	1
Albright College	1	1
Alfred University	1	0
Allegheny College	1	0
Allen Booksellers International, Inc.	1	0
American Association College of Nursing	1	0
American Association of Nursing	1	0
American College for the Applied Arts	1	1
American Council on Education	1	0
American Institute of CPAs	1	0
American Library Association	1	1
American Medical Association	1	1
American Physical Therapy Association	1	0
Applachian State University	1	1
ASEE	1	0
Assoc. of Universities & Colleges of Canada	1	0
Associated Colleges of the Twin Cities	1	0
Athens College	1	0
Augsburg College	1	0
Augusta College	5	0
Augustana College	1	0
Austin College	2	0
Austin Community College	1	1
Avila College	4	0
Baker & Taylor	7	0
Baldwin Wallace College	1	1
Baptist Medical System Schools of Nursing	1	1
Bay Path Junior College	1	1
Baylor University	1	1
Belmont College	2	1
Berry College	1	1
Bethel College	3	3
Birzeit University	1	1
Blackwell North America, Inc.	7	0
Boston College	2	0
Bowling Green State University	1	1
Brenau Hall Nursing School	1	1
Brigham Young University	2	1
British Columbia Institute of Technology	1	1
Brock University	1	1
Broome Community College	1	1
Bryant College	1	1
Bucknell University	1	0
Butler University	1	2
California College of Arts and Crafts	11	0

Total PPP orders by institution-Nov 1988 thru Mar 20, 1990

Organiz	Ties	PLUSS
California State University, Chico	3	1
California State University, Dominguez Hill	1	0
California State University, Fresno	1	1
California State University, Fullerton	2	2
California State University; Long Beach	10	0
Canada Ministry of Education	1	0
Cariboo College	1	0
Carolina College of Nursing	1	1
Carroll College	2	2
Cazenovia College	4	4
Centenary College	7	1
Central Michigan University	1	1
Central Missouri State University	1	0
Central State University	1	1
Cerritos College	1	1
Chadron State College	1	1
Chaminade University of Honolulu	1	1
Charles R. Drew Univ. of Medicine & Science	1	1
Chicago Consortium on Colleges & Universit	0	1
Christopher Newport College	1	1
Cincinnati Bible College	1	0
City University of New York	2	0
Clarke College	1	1
Clarkson University	1	2
Clayton State College	1	0
Clemson University	1	0
Cochise College	1	1
College of Idaho	1	0
College of Mount St. Joseph	1	1
College of New Rochelle	2	2
College of St. Thomas Library	1	0
College of Staten Island	1	1
Colorado State University	2	2
Columbia Union College	1	0
Columbus State Community College	1	0
Concord College	0	1
Concordia University	1	0
Cooper Union	2	2
Cornell University	1	0
Coutts Library Services Inc.	1	0
Covenant College	1	1
Creighton University	1	0
Crowder College	1	0
Cumberland University	1	1
Dalhousie University	2	2
David O. McKay Library	1	1
Delaware Valley College	1	0
Delta College	1	0
DePaul University	2	0
DePaul University Library	1	0
DePauw University	1	0
Dominican College	1	0
Drexel University	1	1

Total PPP orders by institution-Nov 1988 thru Mar 20, 1990

Organiz	Ties	PLUSS
Drexel University Library	1	0
East Carolina University	5	4
East Tennessee State University	3	2
East Tennessee State University Library	1	0
Eastern Connecticut State University	3	0
Eastern Mennonite College	1	0
Eastern New Mexico University	1	0
Ecole Polytechnique Federale de Lausanne	1	0
Edgewood College	1	1
Educational Testing Service	1	1
Elizabeth City State University	1	0
Elizabethtown College	1	1
Embassy of India	1	1
Emery-Pratt Company	1	0
Emory University Hospital	1	1
Everett Community College	1	0
Evergreen State College	1	0
Findlay College	1	1
Fitchburg State College Library	1	0
Florida A & M University	1	0
Florida Atlantic University	3	3
Florida Community College of Jacksonville	1	0
Florida International University	1	1
Florida State University	1	1
Fort Hays State University	1	1
Franklin Pierce College	0	1
Franklin University	1	1
Frostburg State University	1	1
Fundacion Educativa Ana G. Mendez	1	1
Furman University	2	0
Further Education Staff College	1	1
Gannett Center for Media Studies	1	0
Gaston College	2	2
Glassboro State College	1	1
Gordon Institute	1	0
Goshen College	1	0
Governors State University	1	1
Grambling State University	6	1
Grand Rapids Baptist College	1	1
Grand Valley State University	1	0
Grant MacEwan Community College	1	0
Hampden-Sydney College	1	0
Hampton University	1	0
Harding University	3	3
Hawaii Pacific College	1	0
Henderson State University	3	0
Hiram College	1	1
Holy Family College	1	1
Hostos Community College	2	2
Illinois Benedictine College	4	0
Illinois Central College	1	0
Illinois State University	1	2
Illinois Wesleyan University	1	1

Total PPP orders by institution-Nov 1988 thru Mar 20, 1990

Organiz	Ties	PLUSS
Immaculata College	2	2
Imperial College	1	0
Indiana University Bloomington	1	1
Indiana University of Pennsylvania	1	1
Inter American University of Puerto Rico, Ir	1	1
Iowa State University	2	0
J. Hillis Miller Health Center	1	0
Jackson Community College	1	1
James Madison University	2	1
Jamestown College	1	1
Jefferson Medical College	0	1
Jersey City State College	25	1
John Abbott College	1	0
Johnson State College	1	1
Kalamazoo Valley Community	1	1
Kansas State University	1	1
Kean College of New Jersey	3	3
Kearney State College	1	0
Kellogg Community College	1	1
Kennesaw State College	1	0
Knox College	1	0
Laboure College	0	1
Lakehead University	5	2
Lakeview College of Nursing	1	2
Laredo State University Library	1	1
Lesley College	1	1
Lewiston-Auburn College	10	1
Lincoln University	1	1
Loma Linda University	1	1
Louisiana State University	1	0
Louisiana Tech University	1	0
Lourdes College	5	4
Luther College	1	0
Lutheran Church - Missouri Synod	1	1
Lynchburg College	1	1
Mankato State University	1	0
Mars Hill College	9	0
Mary Washington College	3	3
Marycrest College	1	1
Marymount College Tarrytown	1	0
Marywood College	1	1
Massachusetts College of Pharmacy	1	1
McGill University	1	1
McMurry College	1	1
Medical College of Georgia	1	0
Medical College of Ohio	1	1
Memphis State University	3	3
Memphis State University Libraries	1	0
Mercer University	0	3
Mercy College of Detroit	1	1
Miami University	1	1
Michigan State University	2	0
Michigan Technological University	1	0

Total PPP orders by institution-Nov 1988 thru Mar 20, 1990

Organiz	Ties	PLUSS
Midwest Library Service	9	2
Minnesota State University System	0	1
Mississippi State University	3	0
Mississippi University for Women	1	0
Mount Mary College	0	0
Mount Saint Vincent University	1	1
Mt. Mercy College	1	1
Muhlenberg College	5	3
Murray State University	1	0
Nashville State Technical Institute	1	1
Nazareth College	1	0
NCREL	0	1
Neumann College	1	1
New Jersey Dept. of Higher Education	1	0
New York City Technical College	1	1
New York Institute of Technology	1	1
New York Public Library	1	1
Newberry College	1	0
North Texas State University	2	2
Northampton Community College	1	0
Northeast Missouri State University	2	1
Northeastern Illinois University	1	1
Northern Arizona University	1	0
Northern Illinois University	1	1
Northern Kentucky University	1	0
Northwestern Michigan College	2	2
Ohio Northern University	1	0
Ohio State University	4	7
Ohio State University Libraries	1	0
Old Dominion University	1	1
Olivet Nazarene University	1	0
Onondaga Community College	1	1
Ontario Institute for Studies in Education	1	0
Pace University	1	1
Pacific Lutheran University	1	0
Parkland College	1	1
Pennsylvania State University	2	1
Philadelphia College of Textiles & Science	1	1
Phillips University	0	1
Point Park College	1	1
Pratt Institute	1	1
Presbyterian College	1	0
Principia College	1	0
Puerto Rico Junior College	1	1
Purdue University	0	1
Purdue University Calumet	1	1
Queens College	5	2
Radford University	1	1
Raritan Valley Community College	1	1
Ricks College Library	0	1
Ridener University	1	1
Robert Moris College	1	0
Rockford College	1	0

Total PPP orders by institution-Nov 1988 thru Mar 20, 1990

Organiz	Ties	PLUSS
Rockhurst College	1	0
Roger Williams College	1	0
Royal Melbourne Institute of Technology	1	0
Russell Sage College	1	1
Sacred Heart University	1	1
Saginaw Valley State College	1	0
Salem Community College	2	4
Salisbury State University	2	2
Salt Lake Community College	0	1
Samford University	0	1
Samford University Bookstore	1	1
San Jose City College	1	1
San Jose State University	1	1
Sangamon State University	1	1
Santa Clara University	1	0
SCAL/GMU	1	1
Scholarly Book Center	1	0
Seton Hall University	1	0
Seton Hill College	1	1
Social Science Education Consortium, Inc.	1	1
South Dakota State University	1	0
Southeast Baptist University	1	1
Southeastern Lousiana University	4	0
Southeastern Massachusetts University	30	8
Southeastern University	0	1
Southern Connecticut State University	1	0
Southern Illinois University	1	1
Southwest State University	1	0
Springfield College	1	1
St. Bonaventure University	1	0
St. Cloud State University	1	1
St. Francis College	0	1
St. Francis Xavier University	1	0
St. John Fisher College	2	0
St. John's Hospital	1	1
St. John's University	0	1
St. Joseph Medical Center	1	1
St. Joseph's College	5	1
St. Joseph's University	1	0
St. Lawrence University	1	0
St. Louis College of Pharmacy	2	1
St. Mary's College	2	1
St. Mary's College of Maryland	1	1
St. Mary's University	1	0
St. Mary-of-the-Woods College	1	1
St. Paul Bible College	1	0
St. Vincent Medical Center	1	0
Suffolk University	1	1
Sul Ross State University	1	1
SUNY at Binghamton	2	1
SUNY at Farmingdale	1	1
SUNY College at Brockport	2	2
SUNY College at Buffalo	1	1

Total PPP orders by institution-Nov 1988 thru Mar 20, 1990

Organiz	Ties	PLUSS
SUNY College at Oswego	1	1
SUNY Health Science Center at Syracuse	1	1
Syracuse University	3	1
Syracuse University Bookstores	1	0
Tamagawa University	1	1
Tennessee Education Association	1	1
Tennessee Technological University	1	1
Tennessee Wesleyan College	1	0
Terra Technical College	1	0
Texas Higher Education Coordinating Board	1	1
Texas Medical Center Library	1	0
Texas Tech University	3	0
Texas Woman's University	1	1
The Baker & Taylor Co.	1	0
The Book House, Inc.	4	1
The Catholic University of America	1	0
Thiel College	1	1
Thomas Jefferson University	1	1
Trenton State College	0	50
Tufts University	1	1
Tusculum College	1	1
UCHSC School of Nursing	1	1
Union College	1	1
Union College	1	0
United University Professions	1	0
Universidad de Monterrey	1	1
Universidad de Puerto Rico	1	1
University of Illinois	1	1
University Du Quebec-Hull	1	1
University of Alabama at Birmingham	2	1
University of Alberta	1	0
University of Arizona	1	0
University of Arkansas at Little Rock	1	1
University of California, Los Angeles	1	0
University of Cincinnati	0	1
University of Colorado	1	1
University of Colorado at Boulder	1	1
University of Dayton	1	1
University of Edinburgh	1	1
University of Florida	2	2
University of Georgia Libraries	1	0
University of Guelph	1	1
University of Hawaii at Hilo	1	1
University of Health Sciences	1	1
University of Houston-Clear Lake	1	0
University of Houston-University Park	1	1
University of Illinois at Chicago	1	1
University of Illinois at Urbana-Champaign	1	0
University of Indianapolis	1	1
University of Kentucky	2	1
University of London	1	0
University of Lowell	2	2
University of Maine	4	1

Total PPP orders by institution-Nov 1988 thru Mar 20, 1990

Organiz	Ties	PLUSS
University of Manitoba	1	0
University of Maryland Eastern Shore	2	2
University of Maryland University College	1	1
University of Massachusetts at Boston	1	0
University of Miami	1	1
University of Michigan	4	0
University of Minnesota, Duluth	2	1
University of Minnesota, St. Paul	1	1
University of Minnesota, Twin Cities	2	1
University of Missouri-Kansas City	1	1
University of Missouri-Rolla	1	1
University of Moncton	1	1
University of Nebraska at Lincoln	1	1
University of Nebraska at Omaha	1	1
University of New Brunswick	1	1
University of New Hampshire Library	1	1
University of New South Wales	1	1
University of North Carolina at Aiken	1	1
University of North Carolina at Asheville	6	0
University of North Carolina at Chapel Hill	4	4
University of North Texas	1	1
University of Northern Colorado	1	0
University of Northern Iowa	1	1
University of Oklahoma	2	0
University of Oregon	1	1
University of Ottawa	2	2
University of Pennsylvania	1	0
University of Pittsburgh	0	1
University of Pittsburgh at Titusville	1	1
University of Puerto Rico	1	1
University of Puget Sound	1	0
University of Rhode Island	2	2
University of Rochester	3	2
University of San Francisco	1	0
University of Saskatchewan	1	1
University of Scranton	17	17
University of South Carolina	2	1
University of South Carolina at Aiken	5	5
University of South Florida	1	1
University of Southern California	4	4
University of Southern Colorado	1	0
University of Southern Maine	2	0
University of Southern Mississippi	1	0
University of Southwestern Louisiana	1	0
University of Tennessee	1	2
University of Tennessee, Chattanooga	1	1
University of Tennessee, Martin	1	1
University of Texas at San Antonio	1	1
University of Tulsa	2	2
University of Utah	2	2
University of Vermont	1	1
University of Virginia	1	1
University of Washington	2	0

Total PPP orders by institution-Nov 1988 thru Mar 20, 1990

Organiz	Ties	PLUSS
University of West Florida	2	0
University of West Los Angeles	0	1
University of Windsor	1	1
University of Winnepeg	1	1
University of Wisconsin-Eau Claire	1	0
University of Wisconsin-Green Bay	4	0
University of Wisconsin-Madison	2	1
University of Wisconsin-Milwaukee	1	0
University of Wisconsin-Parkside	1	1
University of Wisconsin-River Falls	1	0
University of Wyoming	1	1
USCG Academy	1	1
Utah State University	1	1
Valley Forge Military Jr. College	1	1
Valparaiso University	1	1
Villanova University	7	3
Virginia Commonwealth University	1	0
Viterbo College	0	1
Walla Walla College	1	1
Washburn University of Topeka	1	0
Washington State University	0	3
Washtenaw Community College	2	2
Waukesha County Technical College	1	1
Wayne County Community College	1	1
Weber State College	5	5
Webster University	1	1
West Georgia College	1	1
West Oahu College	1	1
West Texas State University	1	1
West Virginia University	2	1
Western Michigan University	2	2
Western State College	3	0
Westminster College	1	0
Wilberforce University	1	1
Wilfrid Laurier University	1	1
Wilkes College	1	0
William Carey College	0	1
William Jewell College	2	2
William Paterson College	25	10
William Woods College	0	2
Williamsport Area Community College	1	1
Wingate College Library	1	0
Winona State University	2	2
Woodbury University	60	0
Wright State University	1	0
Yankee Book Peddler Inc.	7	0
York University	1	0
Your Choice Admissions Consulting	1	1

Appendix A

Strengthening the Ties That Bind: Integrating Undergraduate Liberal and Professional Study

INTEGRATING UNDERGRADUATE LIBERAL AND PROFESSIONAL STUDY

ED 304 951

Strengthening the Ties That Bind

INTEGRATING UNDERGRADUATE LIBERAL AND PROFESSIONAL STUDY

REPORT OF
THE PROFESSIONAL
PREPARATION
NETWORK

UNIVERSITY OF MICHIGAN

JOAN S. STARK
AND
MALCOLM A. LOWTHER
Directors

Strengthening the Ties That Bind

INTEGRATING UNDERGRADUATE LIBERAL AND PROFESSIONAL STUDY

Report of the Professional Preparation Network

The University of Michigan

Joan S. Stark
Malcolm A. Lowther
Directors

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The project staff, the advisory board, and the members of the Professional Preparation Network appreciate the support of those who have sponsored its work or the foundational activities that preceded it. From 1983 to 1988, sponsors have included:

The Spencer Foundation
The University of Michigan
- Office of the Vice President for Academic Affairs
- Office of the Vice President for Research
- School of Education
- Center for the Study of Higher and Postsecondary Education

The Fund for the Improvement of Postsecondary Education
Colleges and universities that sponsored Network members

The opinions expressed in this report should not be attributed to any of the sponsoring organizations.

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Foreword

Recent critics of various political persuasions and differing educational perspectives have called upon American higher education to do a better job of educating students. There is widespread agreement among educators, political leaders and the public that college graduates should be both competent professionals and involved and committed citizens.

Regardless of their specific field or professional area, all college graduates should be skilled communicators and critical thinkers. They should have an understanding of the social goals their profession promotes and the ethical standards it demands. They should appreciate the aesthetic elements of experience, as a means to both their personal enrichment and the improvement of their professional practice. And they should be committed to improving their skills and refining their values through life-long learning and reflection.

Although these outcomes are widely endorsed in principle within the higher education community, colleges and universities have sometimes fallen short of them in practice. In an effort to counteract a perceived narrowness in their students, too many institutions have simply added more liberal arts courses to already burdensome programs of professional education. Rarely have they attempted to integrate liberal and professional education in ways that have meaning for all students; rarely have they been able to link high standards of scholarship and professional practice to critical thinking on the fundamental issues of life.

During its 18 months of discussion and debate, the Professional Preparation Network—ably directed by Joan Stark and Malcolm Lowther—has given careful thought to how higher education might better integrate professional education and the liberal arts. It has identified the outcomes that higher education should seek to promote and the means by which those outcomes might be achieved. It has highlighted potentially divisive issues that must be addressed and resolved, and it has identified specific tasks for campus leaders, members of the faculty and those in the broader community who are concerned with educational quality. Perhaps most important, it has called upon us all to create a new sense of community as we seek to infuse professional education with the spirit of the liberal arts.

Long ago Matthew Arnold called for "studies that quicken, elevate and fortify the mind ...." In our current age, when complex technical problems are inextricably entwined with social and ethical ones, such studies are more important than ever. And although there may be no single, simple formula for implementing such studies on every campus, the approaches suggested by the Professional Preparation Network give us a strong foundation upon which, individually and collectively, we can continue to build.

Frank H. T. Rhodes, President
Cornell University

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Strengthening the Ties That Bind

CHAPTER 1

A Call to Action

Educators, employers, and the public fear that college graduates with professional degrees fail to possess the knowledge, skills, and attitudes important for citizenship as well as the broad perspective needed for effective professional careers. If this fear is justified, then college graduates may be increasing their potential for improved economic security and upward social mobility at the expense of important and enduring educational benefits.

Concerns about educational quality have fostered much discussion and have generated a variety of proposed improvements. We believe most suggested reforms miss the mark because they tolerate the current schism between liberal and professional education. Efforts to improve undergraduate education should produce programs that simultaneously enhance students' liberal education and their professional capabilities.

Competent professionals are characterized by their ability to link technical knowledge with appropriate values and attitudes when making complex judgments. The education of most college students traditionally has included both liberal study to help develop appropriate values and attitudes and specific professional preparation to provide technical knowledge and skill. Since many college graduates enter professional positions directly following undergraduate study, developing students' abilities to integrate ideas from liberal and professional study should be an essential part of their education. Sadly, educators have devoted too little attention to developing this integrative ability.

Although several recent critiques of higher education have mentioned the importance of integrating liberal and professional study during the undergraduate years,[1,2,3] educators have done little to implement these suggestions. Instead, concern about insufficient attention to liberal education has persuaded many colleges to support reforms that actually may increase separation of the two domains. Consequently, col-

leges are missing opportunities to achieve educational excellence for some students who, in many colleges and universities, comprise a majority of the undergraduates.

We should reject those educational reforms posing either sequential or "separate but equal" programs of liberal and professional education. Continued adversarial relations between these two types of study are by no means inevitable. Since discussions about changing college programs continue, the time is right to strengthen the ties that bind liberal and professional study. We urge colleges to begin promptly.

This call to action is initiated by The Professional Preparation Network, a group of educators teaching in the liberal arts and in eight undergraduate professional fields at four-year colleges and universities. Based on our experiences, we view current efforts toward higher education reform as incomplete because they fail to stress the responsibility of educators to increase the integration of liberal and professional study.

During an eighteen-month dialogue designed to foster campus and professional association concern about integration, our group identified circumstances that inhibit colleges from recognizing and accepting this responsibility. In group discussions we outlined qualities that characterize competent graduates in eight professional fields, and we discussed how these qualities might be fostered. This experience convinced us of the crucial need for similar dialogues among educators on most campuses offering undergraduate career programs.

To expand our dialogue, we circulate this call to action with these purposes:

- We propose intensive discussion, expansion, and refinement of a list of ten educational outcomes that inextricably bind liberal and professional study.

- We identify issues that require resolution in order to achieve integrated educational programs, and we encourage all educators to confront them.

- We suggest strategies and tasks for campus leaders, faculty members, and concerned groups who want to improve curricular integration.

During our association, we have developed ways to promote discourse and establish a feeling of community among those who teach conceptually disparate fields. We also discovered that other faculty groups have held similar discussions with equally satisfying results. Opportunities for such dialogues, which we believe capture the essence of educators' curricular concerns, are essential to improving education in all colleges offering undergraduate professional studies. Yet, they have been preempted by short-term reform initiatives that may provide superficial evidence of change.

We hope to stimulate progress toward an enduring definition of excellence in higher education by suggesting specific ways in which discussions about curricular integration may be fostered. We invite a broad audience of faculty, administrators, students, professional associations, accrediting agencies, prospective employers of undergraduate students, and policy makers to heed our call to action and to join our dialogue.

Strengthening the Ties That Bind

CHAPTER 2

Binding Values, Changing Times, and Curricular Balance

The "shared values and knowledge that bind us together as a society"[4] historically have encompassed both technological expertise and liberalizing views such as those gained from a study of our cultural heritage. Traditional arts and science disciplines have laid the foundations of knowledge without which our modern professions would not exist. Reciprocally, the professional fields have made strong contributions to the liberating character of our society. As a nation, we are dedicated to the ideal of extending educational access to all citizens so that they may enjoy economic security and cultural enlightenment. Based on these mutually reinforcing values of economic, cultural, and human development, students' desire for professional preparation in college has long been the norm rather than the exception.

"the bachelor's degree has lost its potential to foster the shared values and knowledge that bind us together as a society." (Involvement in Learning, 1984, p. 10)

With changing times, the specific talents needed by our nation have varied, and America's colleges and universities have responded to meet new and intensified demands for professional workers. As one recent commission report stated, "Historically, America's economic growth—and thus its national security—has been inextricably linked to the development of human resources and to the advances in research and technology of every sector of the nation's business and industry."[5] Students and their parents continue to expect from colleges an integrated education, encompassing both breadth and depth. In the future, as in the past, students' efforts to achieve economic security and respect in their professions need not preclude development of their capacity to contribute to and benefit from other aspects of life.

"By providing access to professional careers for the broadest cross-section of Americans, including women and members of minority and immigrant groups, public colleges and universities represent a pathway into the American mainstream ... thus helping to ensure the stability of our free economy and our democratic government." (To Secure the Blessings of Liberty, 1986, p. 22)

Despite broad public consensus that higher education should include both liberal and professional study, tension concerning the emphasis placed on each domain in students' educational programs has increased.[6,7,8] In some recent national reports sharp attacks on career preparation have helped to intensify, rather than ease, long-standing friction between faculty who

teach in professional programs and those who teach in the liberal arts. The rhetoric and resulting defensiveness have obscured the need for comprehensive change and limited the range of positive responses. Thus, many solutions proposed on campuses have lacked both vision and realism.

Since the flurry of reports began in 1984, few aspects of collegiate education and few academic departments have escaped criticism. Concern has been expressed about graduates' apparent inability to think critically, relate to others, make ethical judgments, and communicate, as well as their assumed inability to understand, and appreciate their cultural heritage or those of others. Because responsibility for fostering these abilities has been viewed as their domain, liberal arts faculty members have been criticized for failing to achieve their purposes. At the same time professional program faculty have been described as purveyors of crass vocationalism that has eclipsed broader educational goals. In self-defense, some educators in professional fields have pointed to examples of narrowness in liberal arts disciplines and of breadth in professional preparation. When interpreting the critiques, many journalists and policy makers have fueled the fire of conflict by repeatedly emphasizing to the public that colleges convey much technical knowledge, but little cultural knowledge and precious few values.

"Specialization in undergraduate education has become a source of weakness; where it has made the undergraduate experience little more than vocational preparation, the result has been a disservice to students and to the nation."
(Transforming the State Role in Undergraduate Education, 1986, p. 11)

Many proposals have emerged for solving the "quality crisis" that observers attribute to overspecialization in undergraduate programs. The Education Commission of the States, for example, has called upon educators to "restore the balance between specialized training, aimed at preparing students for a single career, and general education, aimed at ensuring a common cultural heritage and preparing students for life."[9] While such a goal is well intentioned, the assumption that education for life and career are distinct and the idea of "restoring balance" require close examination.

Balance implies that the two types of education are separate entities, one of which can be gained only at the expense of the other. We submit that such a win-lose concept of balance is counterproductive. A student's whole education must be greater than the sum of its parts and is a joint responsibility of all faculty. We must avoid artificial distinctions, either between education for life and education for work or between liberal study and professional study. Although differences in educational purpose exist, we must not assume that all forms of specialization are automatically "narrow vocationalism."[10]

"What we should aim at producing is men who possess both culture and expert knowledge in some special direction. Their expert knowledge will give them the ground to start from, and their culture will lead them as deep as philosophy and as high as art." (The Aims of Education, 1929. p. 1)

Recent proposals to achieve curricular "balance" have often suggested changing the time allocated to different portions of students' education. One set of current proposals advocates expanding distribution requirements in the liberal arts; another advocates delaying entrance to career programs while students first study a specified set of liberal arts courses. Such curriculum changes, aptly characterized as "timeframe tinkering," have been short-lived in the past, possibly because they ignore students' motivation to learn material they believe to be purposefully connected with their college goals. The history of curricular change includes alternating periods of advocacy for increased curricular prescriptiveness and advocacy for increased relevance to student concerns. No doubt the cycle will continue and tightened time requirements will eventually be loosened.

"But simply adding requirements—or offering students a larger set of liberal arts courses from which to select—does not achieve one of the principal aims of liberal education, the ability to integrate what one has learned in different disciplines." (Involvement in Learning, 1984, p. 44)

A second set of current reform proposals establishes interdisciplinary "core" courses to help students see relationships among fields. While laudatory, such efforts fall short of strategic comprehensiveness because, in most cases, "interdisciplinary" relates only to arts and sciences subjects, excluding professional subjects ranging from education to law. As with timeframe adjustments, proposals for interdisciplinary study as educational reconstruction are not new. But, for today's world, a narrow definition of interdisciplinary that ignores the chosen major fields of most undergraduate students is not acceptable.

"The aim should be to integrate liberal and vocational education, letting them proceed simultaneously though in varying proportions throughout the student's college life, each enriching and giving meaning to the other." (Higher Education for American Democracy, 1947, p. 74)

A third set of recent reform proposals advocates substantial changes in educational processes. These proposals encourage faculty members to establish clear expectations for students, increase student involvement, promote more active learning, increase student-faculty interaction, renew a sense of community, assess student progress in liberal studies after two years of college, and supply students with timely feedback on their progress. In a report entitled "A New Vitality for General Education,"[11] these process recommendations are linked concretely with proposals intended to increase emphasis on the liberal arts. The proposed linkages merit acclaim, but a broader view would encourage linkage with professional preparation where many of the the proposed educational strategies are already common.

Although our shared values continue to bind us as a society, educators are needlessly divided into opposing camps at a time when decisions professionals must make are more complex and demanding than ever before. Effective decision making requires a strong contextual background. In learning to perform professional roles competently, students must meld past, current, and future-oriented perspectives. They must draw upon values and attitudes as well as skills. To ensure this ability, educators must develop educational programs that capitalize upon real problems students will face in their professions.

"Above all, can the liberal and useful arts be blended during college, as they must inevitably be blended during life?" (College: The Undergraduate Experience in America, 1987, p. 4)

American society deserves more creative solutions for educational reform than proposals that redistribute educational time, interrelate a limited set of disciplines, or graft experiential learning activities onto fields where students may view them as contrived. We cannot merely pour old wine into new bottles; the bottles must be redesigned to receive new wine. Fundamental change is needed, and the higher education community should not settle for simply "restoring balance" to the college curriculum.

Based on a myopic view, our early discussions about fundamental educational change evoked visions of a treaty to

achieve a "ceasefire" between liberal and professional study factions. The successful evolution of our dialogue is demonstrated by acceptance of a more appropriate metaphor. We now recognize two campus cultures that can jointly solve a common problem. The crux of today's educational problem is how to integrate liberal and professional study effectively, building upon the best that each has to offer.[12] Educators have long embraced the value of understanding based upon cultural pluralism. On the campus, as in society, the concerted effort needed to understand a culture different from one's own will be rewarded by the benefits gained. The educational redesign we suggest will seize opportunities that emerge during a reform era to meld two cultures into a mutually benefical whole.

Strengthening the Ties That Bind

CHAPTER 3

Seizing Opportunities for Excellence

The call to integrate practical and liberal education is not new. Varied forms of educational integration have been posed by cogent thinkers for years.[13,14,15] Most recently, the call was reiterated by Ernest Boyer writing for the Carnegie Foundation:

> [Ideally general education should] extend vertically from freshman to senior year . . . In a properly designed baccalaureate program, general education and specialized education will be joined.[16]

Why do today's educators ignore this important suggestion? Why are we headed toward greater separation of liberal and professional study instead of toward closer integration? What can we do now, when fundamental reform is actively being sought? Although there are many reasons for failure to seize this opportunity, we mention here several that are prevalent on many campuses. To highlight our experiences, we have supplied, in the margins, comments made by network members during our meetings.

1. Faculty and administrative leaders seem hesitant to invest the concerted effort needed to pursue truly substantive curricular change. Developing cross-disciplinary curricula, in particular, requires tact, commitment, and perseverance. To avoid the challenge of confrontation among those with different perspectives, administrators have taken the easy road. Too often, this strategy means avoiding discussion about what we value most, the educational program. As colleges and universities have grown more complex, non-educational issues, such as budgets and governance, have become the common topics for campus-wide discussion.

Faculty people too seldom talk about the whole curriculum—only individual courses and programs.

There has been such minimal contact between departments that we have never addressed content overlap.

2. Incentives for faculty members to initiate dialogues with colleagues in other fields are weak. Even as they publicly condemn reward systems they helped create, many

The educational discussions occur in an atmosphere charged with competition for students and resources.

faculty members are guided by policies that devalue interdisciplinary discussions. Issues of turf and resource protection also inhibit dialogue. When resources are scarce, departments and individual faculty members attempt to appear indispensable by commanding territory through specialized expertise. To view education more broadly jeopardizes the existing structure and opens the possibility of new configurations that may be less familiar, less comfortable, and less adequately funded.

By examining the transcripts of professional school graduating seniors, one can see how much more needs to be done to convey the importance of integration to students.

3. Too often, educators are insulated from public and student needs or dismiss them as products of uninformed consumerism. We have observed that students committed to study in a professional field readily embrace liberalizing subjects once they recognize the relation of these studies to their lives and careers. While understanding the importance of this connection for students, faculty continue to shape academic programs according to their own interests and criteria.

We need to assess integration of progress all through the program, not just at graduation.

4. Educators in professional fields have failed to satisfactorily define the educated professional graduate. While each field has identified its own body of professional knowledge and skills, few have articulated the general abilities and characteristics common to most professional roles. Failure to develop such encompassing definitions may limit educators, by default, to isolated discussions of education for work and education for life and to measures of student success that may place undue emphasis on basic or technical skills.

5. Some educators view the first two years of college as a time for maturation and believe that the liberal arts provide the most appropriate subjects for study during this developmental period, at least for students of traditional college age. Others believe that it is essential to deal with learning deficits students bring to college before engaging them in professional study.

While none of the five reasons given above automatically precludes integration of liberal and professional study, it is of grave concern that some observers have prematurely judged professional education as inherently lacking possibilities for educational excellence. For example, one reform group stated that "it is clear that [four-year professional programs] offer few opportunities to develop the capacities and knowledge that most institutions would expect of baccalaureate graduates."[17] Our experiences lead us to challenge this assertion. One surely can and should debate whether the opportunities are used to good advantage but the opportunities undeniably exist. Many professional programs exemplify "study in depth" by maintaining structure and purpose, yet they extend beyond the boundaries of academic departments.[18] Additionally, professional programs can contribute to the liberating education of students who do not intend to pursue professional preparation. Although educational time always seems inadequate, the available time can be used efficiently when liberal and professional learning are seen as compatible, complementary, and synergistic.

For a focus on international journalism the student *must* study geography, political science, sociology, language, and history.

Our program in ocean awareness involves architecture, law, engineering, and oceanography. Obviously it draws on many liberal arts concepts.

Strengthening the Ties That Bind

CHAPTER 4

Defining the Educated Professional

Much of our group effort in the Professional Preparation Network has been devoted to discussing the characteristics of the educated professional and the ways in which we help students acquire those characteristics. We are describing our experiences briefly here because we believe they can serve as a model for others.

Professional education is uniquely shaped by the historical relation of the profession to society and by the characteristics of its practice community. In each field certain conceptual understandings and technical performance standards dictate unique goals or "professional competences" that are of primary concern to educators. At a minimum, these include four types of competence: conceptual competence, technical competence, integrative competence, and career marketability. (See Table 1.)

Educators from all professional fields independently assert the need for students to develop additional important abilities. Minimally, these include critical thinking skills, communication skills, interpersonal skills, awareness of the context for professional practice, and professional ethics. When professional education is exemplary, both students and faculty recognize that such broad abilities undergird technical competence and

TABLE 1

Four Specific Professional Competences

Conceptual Competence:	Understanding the theoretical foundations of the profession.
Technical Competence:	Ability to perform skills required of the profession.
Integrative Competence:	Ability to meld theory and skills in the practice setting.
Career Marketability:	Becoming marketable due to acquired education and training.

suffuse the professional role. Exemplary professional education supplements purely technical and conceptual competence with concerns for adaptability, leadership potential, and motivation for continued improvement—of the profession and of one's self as a professional.

The realization that such goals are shared among educators in various professional fields provided an important foundation for initiating the dialogue of our group, the Professional Preparation Network. The Network deliberately involves distinctly different academic programs. It consists of volunteer pairs of faculty from large and small colleges, both public and private. Each pair has one member from the liberal arts and another from the professional fields of architecture, business administration, education, engineering, journalism, nursing, pharmacy, or social work. Prominent leaders in each field comprise the eleven-member Network Advisory Panel, and our discussions are frequently enhanced by the presence of accrediting representatives and other interested guests. A more strikingly diverse group would be hard to find.[19] Yet, we learned that a set of mutually important potential outcomes provided a foundation to begin discussion among professional and liberal arts educators about the objectives of integration. Such a list of potential outcomes is given in Table 2.

"Adequate measures of educational excellence must thus be couched in terms of ***student outcomes****—principally such academic outcomes as knowledge, intellectual capacities, and skills." (Involvement in Learning, 1984, p. 16)*

In its initial form, the list of outcomes in Table 2 was derived from literature in various professional education fields.[20] In reviewing such objectives, one cannot fail to notice that the goals of professional program educators overlap those traditionally espoused by liberal arts educators. The list bears a striking similarity to the "nine essential undergraduate experiences" proposed recently by the Association of American Colleges task force[21] and the list of important "capacities" named in the Carnegie Foundation report.[22]

"Education in a professional or vocational field may, if based upon the skills and attitudes of our minimum curriculum and presented in a liberal spirit, also provide a strong, enriching form of study in depth." (Integrity in the College Curriculum, 1985, p. 30)

Our efforts were also reinforced by survey evidence confirming that the outcomes in the list most frequently attributed to liberal education are prominent concerns in professional education as

TABLE 2

Outcomes Considered Important by Educators in Eight Undergraduate Professional Fields

	TEN OUTCOMES IN COMMON WITH LIBERAL EDUCATION
Communication Competence:	The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.
Comment:	Reading, writing, speaking, and listening are skills essential to professional practice and to continued professional growth as well as to informed citizenry and continued personal growth.
Critical Thinking:	The graduate examines issues rationally, logically, and coherently.
Comment:	Although critical thinking is a universally desired educational outcome, professionals particularly need a repertoire of thinking strategies that will enable them to acquire, evaluate, and synthesize information and knowledge. Since much professional practice is problematical, students need to develop analytical skills to make decisions in both familiar and unfamiliar circumstances.
Contextual Competence:	The graduate has an understanding of the societal context (environment) in which the profession is practiced.
Comment:	The capability to adopt multiple perspectives allows the graduate to comprehend the complex interdependence between the profession and society. An enlarged understanding of the world and the ability to make judgments in light of historical, social, economic, scientific, and political realities is demanded of the professional as well as the citizen.
Aesthetic Sensibility:	The graduate will have an enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.
Comment:	Sensitivity to relationships among the arts, the natural environment, and human concerns epitomizes aesthetic awareness.

TABLE 2—*Continued*

	TEN OUTCOMES IN COMMON WITH LIBERAL EDUCATION
	Through learning to approach life as an aesthetic experience and by viewing work as an act of aesthetic judgment, professionals can more effectively assess and understand the world and their roles within it.
Professional Identity:	The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.
Comment:	Professional identity both parallels and supplements the liberal education goal of developing a sense of personal identity. The sense of personal worth and self-confidence that develops from experiencing success in professional practice, often including a contributing or altruistic relationship with clients, is an effective vehicle for gaining a sense of one's place in the world as an individual and citizen.
Professional Ethics:	The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.
Comment:	Liberally educated individuals are expected to have developed value systems and ethical standards that guide their behavior. Since in every field professionals face choice and responsibility in the process of making decisions with full understanding of their consequences, the study of ethics provides a context for development of professional ethics.
Adaptive Competence:	The graduate anticipates, adapts to, and promotes changes important to the profession's societal purpose and the professional's role.
Comment:	A liberally educated person has an enhanced capacity to adapt to and anticipate changes in society. Since professional practice is not static, adaptability can be fostered by promoting the need to detect and respond to changes and make innovations in professional practice.

TABLE 2—*Continued*

	TEN OUTCOMES IN COMMON WITH LIBERAL EDUCATION
Leadership Capacity:	The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.
Comment:	All education carries with it the responsibility of developing leadership capacity. This is particularly true for professional education where the problem-decision-action cycle may have broad environmental, social, and individual ramifications. Not only does leadership imply both functional and status obligations, it requires the intelligent, humane application of knowledge and skills.
Scholarly Concern for Improvement:	The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.
Comment:	The heart of the intellectual process is attention to a spirit of inquiry, critical analysis or logical thinking. Although many critical analysis skills are developed as theory and practice are integrated, the professional curriculum can be specially designed to foster among graduates an obligation to participate in inquiry, research, and improvement of the profession.
Motivation for Continued Learning:	The graduate continues to explore and expand personal, civic and professional knowledge and skills throughout a lifetime.
Comment:	A truly educated person will wish to continue learning throughout life. In professional education, substantial emphasis can be placed on fostering individual responsibility for continued professional growth.

well.[23] Clearly, it is erroneous to view the enduring attributes of education as the sole domain of any single group of academic programs and inappropriate to encourage the view that a schism must exist.

Network members began by clarifying the meanings of the original set of outcomes. Later, we increased their specificity, provided interpretive comment, and expanded the discussion's scope by adding three outcomes to form the current list. (See Table 2.) After some progress had been made and rapport was established, we discussed outcomes that we viewed differently, hoping to understand the basis for our disagreement.

These outcomes have been part of our mission since before the network started; the contribution the network made was largely that of affirmation.

We concurred that an educated professional is one who exemplifies the ten outcomes (Table 2) in addition to the four aspects of professional knowledge specific to the field (Table 1). Our group reached this agreement only after much deliberation. Even now, some might wish to alter slightly the language or emphasis of the statements. Indeed, critics have suggested we phrase them more succinctly. Because the final outcomes and interpretative comments resulted from the sharing of conflicting views and thus incorporate multiple perspectives, we have resisted this suggestion. Even though a wide variety of ideas have been included, we expect that not all faculty members will agree initially with our list. We assert unequivocally, however, that these outcome statements provide a fruitful basis for building a sense of community among faculty in a professional program and their liberal arts colleagues, or among faculty in disparate professional fields.

When the professional educator talks about liberal arts and when the liberal arts educator talks about liberal arts, they're talking about two different things.

We are not suggesting that brief discourse among groups of faculty on a campus will produce agreement on the meaning of each outcome, on the types of educational activities which foster it, or on the way in which students may demonstrate it. In fact, we warn that dialogue will not go smoothly at first but must be pursued at length, seriously and persistently. As in any new relationship, much exploration is required for a productive conversation. During the eighteen months that we grappled

with these issues, our discussions were usually friendly, occasionally heated and discordant, but always spirited and profitable. Our testimony that the ten outcomes serve as a basis for initiating important discussion is based on progress we made after we refused to give up in despair. Despite potential difficulties, we believe such discussion is absolutely essential to the continued capability of American higher education to produce appropriately educated graduates.

As the Professional Preparation Network, we engaged in a deliberate search for commonality within our diversity. The extent to which our various fields of professional study already incorporated aspects of liberal education or required liberal study before entering a program varied widely. Despite such variance, all network members entered wholeheartedly into discussions of how liberal and professional education might be more closely interrelated for the benefit of both students and society. We shared experiences, failures, educational practices, and research. Simultaneously, on our own campuses, we planned approaches to improve integration of liberal and professional learning. In some cases, we experimented (both successfully and unsuccessfully) with the Professional/Liberal Undergraduate Self-Study Guide (PLUSS) which others may wish to examine.[24]

The conversations have made me aware that the professional faculty are very concerned about giving their students the right blend of liberal and professional study. As a humanities professor, I have been impressed.

At our own colleges, the success we experienced in initiating change has varied dramatically. Some participating campus teams have moved substantially toward curricular change that will result in increased integration for their programs. In other cases, the network teams persist in trying to engage colleagues on their campuses in discussing the merits of integrating liberal and professional study. On two campuses the initial effort apparently has been suspended, at least until crises or leadership changes have been resolved. The most successful campus projects have been those in which the topic of integration was introduced as an early alternative into curricular discussions already in progress. If discussions of curricular change are too far along, people are already committed to positions and ready to put the issues to rest.

Our core proposal was voted down—it represented lots of work for the faculty—but we will tighten it and resubmit it. As a result, however, our proposal has been broadened and the humanities faculty has increased interest in meeting with the professional school faculty.

In an important sense, the network, with its wide-ranging interests and views, has been a microcosm of a college community. As we have tried to understand each others' perspectives, we have appreciated the difficulties of generating dialogue among academics who have been socialized in very different ways. As a sharing venture, we engaged in a process we called "microparticipation," by playing the role of learner in an unfamiliar academic field taught by a network colleague from that field. As we experienced these educational activities, we assessed how they might contribute to development of liberally educated professionals in our own fields. The rewards of this and similar activities have been well worth the challenge.

We tried switching roles, each taking the other's perspective. Exciting things happened.

To illustrate our point, we observed that a key difference between the same goal espoused by liberal arts faculty and those in professional fields was one of perspective. The professional program educator often related the outcome to a problem in professional context, whereas liberal arts educators related it to a problem in personal development or to broad societal issues. These differences in perspective may mask the commonality of many outcomes to both liberal and professional learning. For example, the outcome we called "professional identity" probably stimulated our most disharmonious discussion. We learned that many professional educators viewed professional identity as a positive outcome—namely, a commitment to unselfish service and improvement of professional expertise. Liberal arts faculty, however, tended to interpret professional identity as a narrow, selfish professionalism often associated with demands for money, status, and excessive freedom from societal oversight.

I feel uncomfortable, even in the network, because we have not sufficiently defined the *differences* between the liberal arts and the professions to know where we can work together.

A broader discussion, occupying much of our time, questioned whether distinctions between professional study and liberal study are natural or artificial. While some network members believed real differences exist that can never be resolved, others suggested that professional and liberal study are essentially the same; the first focusing on a theory of action, the second on a theory of knowledge.

Our best exchanges take place over lunch when the professional faculty and humanities faculty argue their different perspectives.

For some participants these relationships were never satisfactorily resolved. Yet, such differences in perspective can be recognized and resolved only if they are shared. Recognizing that they have received more than their share of blame for "overspecialization," we invited representatives of our accrediting agencies to join the deliberations. Most were convinced, as we were, of the need for better integration and some have acted to strengthen their role. Having gained personally and professionally as network members, we determined to extend this constructive debate more generally to the higher education community.

A year ago many of us could not have even spoken to each other for we had no shared goals or language.

Strengthening the Ties That Bind

CHAPTER 5

Extending a Constructive Debate

Educational leaders who have advocated integrating liberal and professional study[25,26,27,28,29] have stopped short of specifying how such programs might be conceived or who should encourage their birth. In adding our voices to the chorus we are obliged to suggest new verses rather than echo old refrains. In this proposal, we give life to the idea by suggesting ways to foster improved integration of undergraduate professional and liberal study.

"What we urgently need today is a constructive debate about the meaning of the undergraduate college and a willingness to make this part of the educational enterprise more vital and enriching." (College: The Undergraduate Experience in America, 1987, p. 7).

We want to extend our constructive debate, thus reversing the unfortunate drift toward educational separatism. Constructive debate requires a serious and deliberate search for shared goals and values on which to base initial discussions. Establishing the direction of debate and keeping it on course presents challenges to all concerned parties.

We believe that necessary steps include providing academic leadership, promoting faculty responsibility, and involving appropriate external agencies. To encourage this dialogue in four-year colleges and universities offering undergraduate professional programs, we offer challenges to three influential groups: (1) academic leaders, including administrators and other campus leaders; (2) faculty members; and (3) external policy makers, including members of accrediting agencies, professional and disciplinary associations, employers, and public agencies.

Challenges to Academic Leaders

In many colleges and universities, a lamentable chasm separates the liberal arts college and professional departments. Competition for resources is keen, autonomy is jealously guarded, and cross-disciplinary discourse is fraught with difficulty. Administrators have failed to insist that all faculty discuss common educational goals for all students. We urge college leaders to initiate discussions that bridge the widening gulf between liberal and professional educators.

"postsecondary institutions [should] be less grandiose in their statements of goals and far more specific about their objectives." (Involvement in Learning, 1984, p. 39)

The dean of arts and sciences addressed the faculty of the professional school, telling them of progress and urging collaboration.

Specific approaches to positive collaboration depend upon campus history and culture, but our experience shows that success often depends upon administrative effort to mobilize a critical mass of faculty and provide visible commitment to integration. Administrative effort must be reinforced by faculty leaders who insist that educators with dissimilar orientations can learn to work together productively. Because academic leadership in colleges is decentralized and complex, we address our challenges to a broad array of administrators and other campus leaders.

Having a prominent dean bring this issue to colleagues in the Council of Deans was crucial to getting the discussion started.

1. College administrators and campus leaders should promptly initiate intensive discussions about educational outcomes jointly sought by educators in liberal and professional fields. Furthermore, recognizing that rapprochement between separate cultures requires time, they should actively encourage patience with the confrontation that often characterizes initial discussions.

   For large colleges, attempting to establish an encompassing "community of interest" designed to establish continuity and integration in the curriculum throughout the entire campus may not be realistic. Based on our experience, however, it is realistic to build small discussion groups (perhaps one professional field and one or two liberal arts departments) that serve as nuclei for expanding the dialogue. It is important that faculty members in both liberal arts and one or more professional fields be involved and that news of fruitful discussions be widely circulated.

We found many "mythical" barriers—such as regents policies and accreditation requirements that people only thought existed. These myths served to keep the programs separated.

2. As a supportive strategy, administrators might solicit faculty views of campus practices that facilitate integration and of systematic barriers that prevent it. This will enable leaders to reinforce early discussions with visible attempts to enhance facilitators and remove barriers. Our self-study guide, the PLUSS, contains a list of such practices that can be adapted for local use.

3. Administrators should reexamine campus policies to be sure they will reward faculty efforts to integrate liberal and professional learning and teaching. Many faculty members seem discouraged by lack of incentives for interdisciplinary teaching or publishing. Visible rewards for innovative work must be established and endorsed by both faculty peers and administration.

If we participate in collaborative courses, we will lose credit hours from our workloads.

4. Administrators and faculty committees may wish to redefine or reemphasize purposes of sabbatical leaves to assure faculty members that scholarly development in related fields is of equal value to intense study or research in one's own field.

A capstone course synthesizing knowledge and insights from multiple disciplines is difficult to plan.

5. As informal communication channels are opened, campus leaders should promptly create formal structures that reinforce relations between liberal and professional faculties. Every dean should cement firm connections among interested faculty members of diverse persuasions. Examples include prestigious joint teaching appointments across disciplines, related pairs or clusters of courses students take simultaneously, team teaching efforts, seminars that place professional work in context, incentive funds for integrative activities or explorations, and opportunities for interdisciplinary research, field experience, or project groups.

Weekly brown-bag meetings included faculty members and chairpersons from nursing, home economics, architecture, engineering, and education. Each week we discussed one of the outcomes to break the ice.

Informal groups foster collaboration; more formal approaches (committees, motions, etc.) foster confrontation.

6. Campus leaders (including students) can initiate and support informal learning activities that bring together professional program and liberal arts faculty and students. For example, the importance of examining varied perspectives can be emphasized through brown-bag discussions, activities with student associations, and luncheons where prominent speakers address issues of common interest to professional and liberal study. At first, such efforts should be of sufficiently small scale to encourage dialogue. They may begin with two professional fields already sharing some identified interests and a related

With some adaptation, we think we can put the outcomes into the college bulletin as part of the mission.

liberal arts department, such as nursing, social work, and psychology.

We plan a pilot project with a small group of students who would take a selected group of existing liberal arts courses. This is a smaller and more feasible step than developing the total set of integrated courses immediately. We'll do comparative evaluations with a control group.

7. Administrators should commission internal studies of undergraduate education that encompass all academic programs. Among these should be studies specifically aimed at understanding and documenting parallel curricular patterns and common student outcomes in diverse fields of undergraduate professional study and the liberal arts. The studies should begin neutrally, assuming no prestige hierarchy among various undergraduate programs.

I think our president may accept my proposal to establish a task force on liberal and professional education. He is looking for ways to follow up this project.

8. Campus governing bodies should ensure that mission statements for undergraduate education emphasize the importance of integration and encompass both liberal and professional study. Similarly, college public relations materials should document and make visible integrative efforts, giving attention, where needed, to expectations for incoming transfer students who may have lacked integrative opportunities in their former colleges.

Challenges to Faculty Members

The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement in learning. (Involvement in Learning, 1984, p. 19)

The issues underlying our challenges to faculty members fall into three categories: improving faculty communication, increasing curricular coherence, and involving students in learning. In our experience, the first of these challenges, improving faculty communication, is prerequisite to the others. When liberal education and professional program faculty members discuss common educational outcomes, dialogue about educational coherence and involvement often follow naturally. In each of these areas, faculty have the primary responsibility and are in the best position to implement change. We note, however, that each challenge we issue to faculty has a complementary student responsibility to strive for an integrated education. Student concern often follows from visible faculty concern.

1. For each field, professional and liberal arts educators need to jointly define an "educated professional." The effort will challenge both groups to reexamine educational philosophies, objectives, and teaching strategies. We suggest that faculty in professional fields initiate the discussion, seeking out a small potentially receptive group of liberal arts colleagues and focusing on one or two particularly essential outcomes. Because the "Potential Liberal Outcomes of Professional Study" (Table 2) are sufficiently broad to be useful in all professional programs, we suggest discussion, extension, refinement, or revision of this list as a possible starting point. On some campuses, a parallel model may already exist for discussing communication competence through a "writing across the curriculum" movement.

Perhaps we should call the list of outcomes "a bill of rights for students"—the right to have liberal education.

2. After conversation is underway, faculty can increase interdisciplinary understanding by sharing specific classroom activities or field experiences that they use to achieve integrative outcomes. At a retreat or in a day-long conference setting, we suggest trying a process we called "microparticipation." These half-hour "learning sessions," drawn from diverse fields, require little preparation and are well received. Liberal arts educators also might accompany professional program faculty into the field or clinic, noting opportunities that suggest joint efforts. Weekly meetings can focus on specific links between two subjects, such as a bridge two of our members built between ethics and pharmacy practice. Classroom visitations are probably not a good vehicle for exchange of ideas until rapport is firmly established.

In the simulated labs and experiential components of pharmacy, we can bring all the outcomes together, but we need more social and behavioral background.

3. Curricular proposals to integrate liberal and professional study should include change strategies that go beyond addition or modification of course credits or academic time frames. Faculty members must work actively to avoid preoccupation with the natural concern that integration may reduce individual and program identity, autonomy, or

We could identify courses where integration was undoubtedly occurring but didn't know specifics, so we interviewed faculty teaching these courses. It was surprising how much we had to build on.

resources. In the PLUSS, the Integration/Collaboration Matrix provides one way to organize discussion about the appropriate extent and type of integration in a given setting.

4. Parallel to our challenge to administrators, faculty groups should tell campus leaders of barriers to integration that must be removed and facilitators that should be strengthened. One obvious barrier may be physical and organizational arrangements on the campus that inhibit cross-discipline communications; other barriers will operate more subtly. For example, on some network campuses departmental allegiances were believed to be so strong that faculty characterized the general education requirements as a set of "distributional bargains."

One extraneous motivator toward breadth is that our B.A. graduates will be eligible for Phi Beta Kappa; the B.S. graduates are not.

5. As discussions of integration progress and faculty members begin to accept responsibilities outside a particular discipline or program, they may desire to gain additional interdisciplinary perspectives. Some professional program faculty could pursue additional liberal arts study informally and some liberal arts faculty might seek more exposure to professional knowledge and practice. These desired actions indicate progress and can be satisfied by faculty development models that arise spontaneously from discussions of integration. These models include (a) partnerships of two faculty members with complementary interests, (b) partnerships of faculty members teaching interrelated courses,[30] (c) group seminars focusing on problems of mutual importance, and (d) group discussion of books, films, or other trigger devices that support the sharing of knowledge and perspectives. One interesting model, based on extended discussions involving many professional faculty, was developed at Syracuse University;[31] another model, focusing on great books discussions, has been used at Siena Heights College.[32] Collaboration among colleges may be useful, too; members of three Network institutions

The cross-disciplinary paired courses were developed by summer teaching grants. Most pair an arts and science course with a professional course. All students must take one set of paired courses.

I had to read from unfamiliar journals, detach myself from my professional field, and develop a different perspective.

located in the same urban region met occasionally to share their efforts and obtain collegial reinforcement.

6. Efforts to develop new cross-disciplinary channels and topics for faculty communication are time consuming. Unless the reward structure has been adjusted, the first adventurers might be senior, tenured faculty who have already achieved considerable respect in their fields. Alternatively, sizeable groups of committed faculty members can make a strong case for adjusting incentives.

I think professional schools that are trying to increase their status are inclined to separate themselves and develop their own technology. When you've "arrived," you realize you now need the integration.

7. Recent national reports illustrate that it is easier to define what curricular coherence is *not* than what it should be. To illustrate, one report characterizes a quality college program as one that has "structure," "discipline," and "complexity," but is not a "hodgepodge" of courses.[33] Unquestionably, coherence involves issues of structure, complexity, breadth, prescriptiveness, focus, and, most essentially, interrelatedness. The faculty in any institution has a responsibility to go beyond this rhetoric and define coherence for its students.

Our pharmacy students are fearful of examining issues where there are no clear cut answers. This is a key reason to broaden.

Defining curricular coherence may be easier if liberal arts and professional field faculty work together within a problem-solving context. One strategy is to start with problems new professional graduates encounter in practice and assess the broad understandings needed to make effective judgments. Building on such situations, faculty can construct a meaningful and coherent program for professional students. For liberal arts students a parallel strategy would consider how various professions, such as law, engineering, and business affect all our lives. Liberal arts faculty members involved in such discussions with professional program colleagues can use their experience in "problem-solving across the professions" to improve advising of students seeking career direction.

8. In undergraduate professional programs, building a coherent curriculum requires conscious selection and

You must try to convey to students that it matters which electives they take. As a result of our work, students have begun to recognize that the professional faculty members value liberal education. Good education is improved when professors are asked to identify for students these specific outcomes.

integration of appropriate liberal arts concepts. Faculty should articulate their expectations of competent graduates. For example, if graduates are expected to understand the sociological or economic context for professional practice or the history of the profession, these requirements should not appear merely as added burdens. It is essential to clarify for students the crucial relation of this knowledge to practice.

9. Advising procedures for professional students should be strengthened so that all faculty members are clear about which liberal arts courses have been selected, collaboratively planned, clustered, or merged with professional study to promote essential student development in each professional field. Advisors should give careful consideration to the timing of these courses in the professional program. We feel strongly that the common advice "Take your liberal arts courses and get them over with during the first two years" is unwise and incompatible with an emphasis on integration. Similarly, liberal arts advisors should point out to their students the value of courses that help them appreciate the place of the professions in society. Too often, such courses have been relegated to interim term or "minicourse" status.

We see a new concept for us—professional education as an inverted triangle beginning with a narrow focus but ideally becoming broader and more encompassing as the students need to apply professional knowledge.

10. Faculty members should encourage students to assume responsibility for extending their education beyond the formal classroom setting. To help students accept responsibility, colleges must improve and extend early career guidance programs, stressing appropriate life/work relationships rather than mere job seeking. Students will pursue narrow technical programs of study and leisure time activities if society and their teachers seem to reward narrowness; they will seek breadth if their teachers seem to reward breadth.

Just as the business students should have liberal arts, the liberal arts students need some knowledge of business in their lives.

11. Having established clear expectations, faculty should provide comprehensive feedback to students about their

development as educated professionals, including both the selected liberal education outcomes and specific professional knowledge and skills. This process is enhanced by the direct involvement of liberal arts educators in providing feedback to professional students. For example, some architecture programs invite English and speech faculty members to collaborate in coaching and judging students as they present design projects to prospective clients. As a result, liberal arts faculty members gain new perspectives on performance-based assessment.

An example of a good "problem" for several disciplines such as social work, education, pharmacy, and nursing, is the issue of high-risk pregnancy.

12. Faculty can help students find role models among professionals who demonstrate through practice the value of educational breadth. These individuals can speak authoritatively and meaningfully with students about the importance of integrating liberal and professional study.

13. Both research and experience tell us that students who are active rather than passive learners readily learn and use the concepts and skills taught. Furthermore, students learn best when they are strongly motivated, and today's college students typically have keen interest in career preparation. For programs that integrate liberal arts content and perspective with specialized professional education, a wide range of options is available to keep learners active and involved. Examples include writing activities; debates; clinical, studio or community projects requiring synthesized knowledge to solve complex problems; case studies; interdisciplinary lectures; simulations; and capstone courses. These experiences build on professional *esprit de corps* to make the liberal learning relevant. Our network members experienced the architect's design problems, the journalist's ethical dilemmas, and the health professional's clinical assessment techniques as types of active learning that could be used to reinforce many liberal education objectives.

A natural relationship is the merger of world civilizations with the history of architecture. What educated tourist is not in need of some background in architecture?

14. Integrated professional and liberal study is a natural arena for expanding professional students' public service activities following notions currently under discussion on many campuses.[34] Reciprocally, public service activities for liberal arts students can provide exposure to the professions.

15. Self-direction and internal motivation are essential in professional life. Therefore, faculty should help students develop their ability to direct their own learning and to assess their own academic and skill development. Working together as a team, the professional and liberal arts fields have much to contribute to the broader application of performance-based competence assessment and self-directed activities.

Adaptability is reading the contours of the present and envisioning their importance for the future.

Challenges to External Policy Makers

"Liberal education can be thoroughly useful when its relevance to life is brought sharply into focus by a vocational purpose that gives point and direction to the student's program. The danger of futility lies in an unfocused, aimless study of liberal subjects." (Higher Education for American Democracy, 1947, p. 74)

Policy makers, employers, and the public are interested in helping colleges set high educational standards. Often responding primarily to media interpretations, they have not yet been exposed to the potential benefits of integrating liberal and professional study. Educators must articulate this idea more clearly and seek the productive involvement of external groups.

The specific groups to whom we offer challenges include employers, state and federal policy makers, accrediting agencies, licensing agencies, and scholarly and professional associations. Many challenges will necessarily concern more than one of these groups.

1. Educators should unite with business and professional leaders to identify qualities sought among graduates and ways in which these qualities may be fostered. Based on their own experiences, executives of major private and public corporations, political figures, and others have stressed the need for appropriately educated professionals. They have urged colleges to strengthen experi-

ences that promote general capabilities traditionally associated with a liberal arts education. Since these individuals also employ graduates who have completed specialized programs, it is essential to ensure their additional involvement in curricular revisions. New ways must be found to jointly establish standards of educational excellence that move such discussions beyond rhetoric and exhortation. Focused discussions will help educators translate broad ideas into specific educational activities that can improve subsequent performance of graduates as professionals and citizens. Involvement in setting standards encourages commitment of employers to help in validation of criteria through evaluation of graduates.

2. Employers and colleges should jointly develop guidelines for both employers and graduate/professional schools who recruit on college campuses. The guidelines should avoid endorsing recruiters who, by their inquiries, suggestions, or offers of positions, reinforce for students the image of intense, narrow specialization as the *sine qua non* of professional success.

3. Accrediting agencies frequently have been accused of fostering narrow educational programs through restrictive standards. To counter these accusations effectively and to regain lost credibility, accreditors should make more public their established requirements of integrated liberal and professional study and more visible their recent initiatives. Accreditors should also work with educators and public agencies to discourage false implications that they support unnecessarily narrow approaches. Faculty members comprise a substantial constituent group within most accrediting agencies and should take an active part in this self-regulating effort.

Our accreditation self-study provided the perfect opportunity to use the PLUSS and to initiate more discussion of liberal learning outcomes. The PLUSS is a lengthy complex instrument. But we were able to adapt sections to our local situation.

4. The accrediting process should encourage, identify, and reward the successful integration of liberal and professional study. Specialized and regional accreditors might

cooperate in developing a pool of peer reviewers who would bring to program review a specific expertise in integrated study. Accreditors could also publish a list of documented exemplary integrative programs.

5. Accreditors will need to deal candidly with the problem of community college transfers from institutions that allow early specialization without concurrent attention to the liberal aspects of professional development.

Some integrated courses could be developed for television and thus serve as models.

6. Professional and disciplinary associations should facilitate integration by sponsoring serious discussions focusing on opportunities for integration and by offering avenues for dissemination to those interested in sharing educational activities and outcomes of integrated programs. The Association of American Colleges is currently engaged in such discussions to help introduce a stronger contextual component into engineering curricula. Similarly, the teaching divisions of such groups as the American Historical Association and the American Sociological Association could encourage member symposia to report educational endeavors that help professional students understand the context for practice.

7. Educational and philanthropic foundations should support more intensive searches for examples of educational excellence based on integration, sponsor research that examines their impact, and promote dissemination of their important characteristics.

Studies of integration need, at least in part, to be ethnographic so we can learn how the integration occurs for the student; who encourages it, what reinforces it?

8. All groups should cooperate in ensuring that various attitudes, values, qualities, and skills assumed to contribute to competent professional practice actually achieve that end. Research examining ways that graduates use skills in their professional work can reduce the dependence of curricular decisions on anecdotes and assure use of appropriate measures for student assessment.

Validation measures should be grounded in professional practice, societal needs, and learning theory. Since practice is continuously in flux, periodic reexamination must involve employers, professional associations, and licensing agencies. In addition to traditional quantitative methods of validation the use of qualitative techniques should be expanded. For example, working together with liberal arts colleagues, educators in professional fields can draw from their previous experiences (clinical observations, practica, or attitudinal measures) to devise indicators of "the liberally educated professional." Alternatively, assessment of student learning could be grouped into intuitively meaningful categories such as knowledge about what to do, when to do it, and why do it. Accreditors can point to exemplary programs that have conducted validation studies suitable for replication.

9. Professional associations, employers, and licensing agencies should cooperate with educators to help identify those competences that should (and can) be acquired before professional employment and those that are best developed or expanded after entry into the profession.

Try building case studies around the "crisis of the week" in any field.

10. A variety of task forces, curriculum committees, and project groups from national associations and accrediting groups must take a more assertive role in defining college-level outcomes students should achieve and in developing measures of integrated liberal and professional study. Unless these groups take the initiative, state and federal policymakers who are sponsoring assessment plans may encourage the creation of minimal performance standards rather than high standards of broad competence to which professional graduates should aspire. The approach external policy makers take and the relationships they develop with educators can either facilitate or retard efforts toward integration.

    At the local level, employers should work with faculty members to develop definitions and methods to measure

achievement of the liberal outcomes of professional education as well as their impact on personal and professional success. Faculty who are adept at testing and measuring skill performance might extend their assessments to encompass liberal type outcomes. Nursing provides a useful example where students' interpersonal skills when performing a procedure are assessed as equally important to the technical skill used. Similarly, liberal arts faculty have skills in appraising broad outcomes, such as critical thinking and use of perspective in problem-solving, to share with their colleagues in professional fields.

11. National testing agencies have specific experience in constructing occupational and professional tests. Currently, they are developing new measures of general education that juxtapose concepts from traditional disciplines against important basic skills.[35] These agencies should be encouraged to work with interested faculty members in developing similar tests that encompass both liberal and professional knowledge, skills, and attitudes.

Strengthening the Ties That Bind

CHAPTER 6

A New Spirit of Learning: A New Sense of Community

The current era of curriculum reform will prompt multifaceted change in American education. Whether the changes will be sufficiently broad and enduring remains to be seen. During this period of curricular ferment and reform, many have looked backward to the "good old days" rather than forward to needs of our rapidly changing society. Such nostalgia may have encouraged premature adoption of curricular reforms that are no longer appropriate or effective.

"We must strive not for vocational training nor for a return to the traditional liberal arts but rather for professional education in the most expansive sense. Liberal education has to be provided through a professional education, not instead of it." (... Or What's a College For?, 1986, pp. 10-13)

As college costs rise, few students can afford to lengthen the college years in order to pursue liberal and career education sequentially. More importantly, separate pursuit of these educational domains is less effective than building on student interests, which also promote active involvement in learning. As one university president has said, "We need not a new curriculum, but a new spirit of learning—some simple, meaningful, achievable educational goal our new educational paradigm must be achieved through—not instead of or in defiance of—students' career goals."[36]

In response to recent criticisms of eroding educational breadth, liberal arts faculty members have understandably responded with efforts to extend, strengthen, broaden, and interrelate liberal arts subjects as a way to restore "educational balance." Perhaps because their enrollments are more secure, professional program faculty have been less motivated to respond than disciplinary faculty. Surely, there has been little indication that the two groups have heard the calls for integration or that they have reached out to one another.

In recent critiques, some have also called for a return to a "sense of community" in our colleges. This suggestion can incorporate the need to bridge the gulf that currently separates liberal and professional study. We believe the idea of reestablishing a sense of community is viable if grounded purposefully in values shared by most faculty and students. The potential liberal

outcomes of professional education can be used to strengthen the ties that bind liberal and professional study because they give meaning and stability to the education of the student while accommodating the rich diversity of the university.

In the Professional Preparation Network, liberal and professional educators have reached out to each other. Our goal has been to examine varied educational objectives, strategies, and interdisciplinary arrangements that equip professional students to solve the complex problems of our times and assist liberal arts students to appreciate the societal contributions made by the professions. Such arrangements require that faculty depart from comfortable and familiar patterns, breaking new ground as they reconsider educational purpose and organization. Having experienced this dialogue, we are unlikely to be satisfied by a return to the "good old days" of separatism. The tasks of developing a new spirit of learning and of building a new sense of community are so crucial that they must involve all faculty and students.

A. National Advisory Panel

Stephen M. Aigner,[1,2] Associate Professor and Director, Undergraduate Social Work Program, Iowa State University

Thomas Bausch,[1] Dean, College of Business Administration, Marquette University

Mary Sue Infante, Dean and Professor, School of Nursing, Boston College

Robert Metcalf, Professor and Dean Emeritus, College of Architecture and Urban Planning, University of Michigan

Richard Millard,[2] Past President, Council on Postsecondary Accreditation

L. Jackson Newell,[2] Professor and Dean, Liberal Education, University of Utah

Dwight Sangrey, Dean and Professor, School of Engineering, Rensselaer Polytechnic Institute

Ray Schaub, Interim Director, World College, Eastern Michigan University

Stanley Soffin,[1,2] Professor and Chairperson, School of Journalism, Michigan State University

Linda Strand, Assistant Professor of Pharmacy Practice and Director of Graduate Programs in Pharmacy Administration, University of Utah

Richard Wisniewski, Dean and Professor, College of Education, The University of Tennessee

[1] Also named as an official representative by a professional accrediting agency.

[2] Member of the Task Force that helped draft this report.

B. Network Members and Guests

Network Members[3]

Robert Armour,[2] Professor of English, Virginia Commonwealth University

Catherine White Berheide, Associate Professor and Chairperson, Department of Sociology, Anthropology, and Social Work, Skidmore College

James H. Bissland, Associate Professor and Chairman, Department of Journalism, Bowling Green State University

Elmer E. Botsai, Dean and Professor, School of Architecture, University of Hawaii at Manoa

Ronald R. Cavanagh, Associate Professor of Religion and Vice President for Undergraduate Studies, Syracuse University

Robert K. Chalmers,[1] Bucke Professor of Pharmacy Practice and Department Head, School of Pharmacy and Pharmacal Sciences, Purdue University

Taylor R. Durham, Assistant Professor of Organization and Management, Department of Business, Skidmore College

Barbara S. Fuhrmann,[2] Professor, Department of Educational Services, Virginia Commonwealth University

Gerald M. Gross, Associate Dean, Professor, and Director of Undergraduate Programs, School of Social Work, Syracuse University

Suzanne L. Hawes, Professor, School of Health Professions and Nursing, William Paterson College of New Jersey

Sybillyn Jennings, Associate Professor of Psychology, Russell Sage College

Thomas Kaska, Professor of English, Wilkes College

Thomas D. Klein, Professor, Department of English, Bowling Green State University

Edmund B. Lambeth, Professor and Associate Dean for Graduate Studies, Research and Faculty Development, School of Journalism, University of Missouri

Richard G. Law, Associate Dean and Associate Professor, College of Sciences and Arts, Washington State University

Reece J. McGee, Professor and Master Teacher, Department of Sociology and Anthropology, Purdue University

George A. Mostoller, Associate Professor and Director of Engineering Technology, University of Pittsburgh at Johnstown

Roy Moore, Professor, School of Journalism, University of Kentucky

Umid R. Nejib,[2] Professor and Dean, School of Engineering and Physical Sciences, Wilkes College

Mary Lou Peck, Assistant Professor of Nursing, Russell Sage College

Sister Eileen Rice, O. P. Program Director, Teacher Education, Sienna Heights College

J. William Rudd, Professor and Director, School of Architecture, Washington State University

Larry Schuetz,[2] Associate Professor of English, College of Education, University of Wisconsin-Whitewater

Richard K. Seymour, Dean and Professor, College of Languages, Linguistics, and Literature, University of Hawaii at Manoa

Paul M. Strzempka, Associate Academic Dean and Assistant Professor of Classics, University of Pittsburgh at Johnstown

Louis J. Swift, Professor of Classical Languages and Literatures, Director, University Studies Program, University of Kentucky

Jon Torgerson,[2] Associate Professor and Chairperson, Department of Philosophy and Religion, Drake University

James Winship, Assistant Professor of Social Welfare and Director, Teaching Enhancement Center, University of Wisconsin-Whitewater

J. Mark Winston, Ellis and Nelle Levitt Associate Professor of Pharmacology, College of Pharmacy and Health Sciences, Drake University

Lois Wolf, Associate Professor of Political Science, William Paterson College of New Jersey

Guests

Donald Anderson,[1] Professor of Engineering, Michigan State University, Representing Accrediting Board for Engineering and Technology

Donna Gollnik,[1] Deputy Executive Director, National Council for Accreditation of Teacher Education

Peter Marsh, Professor of History and Director of the Mellon Foundation Project on Integrating Liberal and Professional Study, Syracuse University

John Maudlin-Jeronimo,[1] Executive Director, National Architectural Accrediting Board

John Paul Ryan, Staff Director, American Bar Association, Commission on College and University Nonprofessional Legal Studies

[1] Also named as an official representative by a professional accrediting agency.

[2] Member of the Task Force that helped draft this report.

[3] Network members listed participated in two or more of the meetings.

C. Staff

Joan S. Stark, Professor of Higher Education, The University of Michigan

Malcolm A. Lowther, Professor of Education, The University of Michigan

Bonnie M. K. Hagerty, Research Associate and Doctoral Candidate in Higher Education and Nursing, and Lecturer in Nursing, The University of Michigan

Richard Bentley, Research Assistant and Doctoral Candidate, The University of Michigan

Ray Brown, Research Assistant and Doctoral Student, The University of Michigan

C. Lynne Haven, Research Assistant and Doctoral Student, The University of Michigan

Philip Jones, Research Assistant and Doctoral Candidate, The University of Michigan

Pamela Lokken, Research Assistant and Graduate Student, The University of Michigan

Gretchen Martens, Research Assistant and Doctoral Student, The University of Michigan

D. Description of PLUSS

The Professional/Liberal Undergraduate Self-Study (PLUSS) helps to stimulate initial discussion within undergraduate professional programs planning to integrate liberal education goals in students' experiences. PLUSS also provides a framework within which professional program and liberal arts faculty may identify and mutually resolve various issues related to such integation in an organized and collegial manner.

Typically, a decision to use PLUSS as a stimulus to discussion will be made by a particular undergraduate professional program (e. g., nursing, business, architecture). This program will then invite other faculty members concerned with liberal education to join their discussions. PLUSS helps identify common views, differing views, and other starting points for dialogues. If students' and recent graduates' views are also included, an even wider perspective is gained.

PLUSS is based on two lists of broad student outcomes:

Traditional Professional Competence	Outcomes frequently considered primary goals of professional preparation in college.
Liberal/Professional Education Outcomes	Outcomes encompassing goals of liberal education but phrased in terms especially relevant to graduates who prepare for professional positions.

The two sets of outcomes can be viewed as overlapping realms (see figure). The liberal/professional outcomes express common goals for students endorsed by both professional and liberal educators. Because colleges and professional programs may find that some desired outcomes are not covered in these lists, PLUSS provides space to add other locally important outcomes.

The particular set of liberal/professional outcomes included in PLUSS was originally derived from literature in professional fields. Subsequently, the set was expanded, refined, and field-tested during 1986 by pairs of professional and liberal arts faculty from several colleges and universities.

PLUSS has separate versions for (1) professional program faculty, (2) liberal arts program faculty, (3) professional program students, and (4) recent graduates of professional programs. Although parts of each version are printed in survey form, the survey responses are intended to be collected informally to stimulate discussion within and among campus groups. The available sections of each version are given in the table below. Within each version, the sections may be used in any combination.

	AUDIENCES OF PLUSS			
Section of PLUSS	Professional Program Faculty	Liberal Education Faculty	Professional Program Students	Professional Program Recent Graduates
I. Survey of Important Liberal/ Professional Outcomes	•	•	•	•
II. Identifying Existing Educational Activities that Achieve Outcomes	•	•	•	•
III. Adequacy of Program Discussions	•	•		
IV. Collaboration/Integration Matrix and Discussion Guide	•	•		
V. Indicators of Professional/ Liberal Integration	•	•		
VI. Facilitators and Barriers Discussion Guide	•	•		

E. Case Studies

The Professional Preparation Network desires to share its work more fully than is possible in this brief report. Consequently, we plan to make available a booklet that describes our efforts in more detail. This descriptive publication, which we hope will be useful to other colleges and universities, will include two parts. Part I will describe our activities, dilemmas, and group dynamics as a network of strangers sharing diverse perspectives about liberal and professional study. Part II will describe how efforts toward integration proceeded—sometimes successfully, sometimes not—at several colleges where network members attempted to engage their colleagues in their discussions. We anticipate that this booklet will be available in fall 1988.

F. Related Information

The Professional Preparation Project Staff maintains a list of related projects that are underway and a bibliography of materials to share with interested persons. So that we may maintain their currency, the lists are available upon request.

Notes

[1] Association of American Colleges, *Report of the Project on Redefining the Meaning and Purpose of Baccalaureate Degrees: Integrity in the College Curriculum* (Washington, D. C.: The Association, February 1985).

[2] E. L. Boyer, *College: The Undergraduate Experience in America* (New York: Harper and Row, 1987).

[3] D. Bok, *Higher Learning.*, (Cambridge, MA: Harvard University Press, 1986).

[4] National Institute of Education, *Involvement in Learning: Realizing the Potential of American Higher Education* (Washington, DC: Study Group on the Conditions of Excellence in American Higher Education, October 1984), p. 10.

[5] American Association of State Colleges and Universities, *To Secure the Blessings of Liberty: Report of the National Commission on the Role and Future of State Colleges and Universities* (Washington, DC: The Association, 1986), p. 22.

[6] National Institute of Education, op. cit.

[7] Association of American Colleges, op. cit.

[8] Education Commission of the States, *Transforming the State Role in Undergraduate Education* (Denver: July 1986).

[9] Ibid, p. 12.

[10] Whereas the idea of a vocation or calling once had positive connotations, use of the form "vocationalism," frequently modified by the adjective "narrow," now conveys a negative value.

[11] Association of American Colleges, *A New Vitality in General Education* (Washington, D. C.: The Association, January 1988).

[12] Boyer, op. cit.

[13] A. N. Whitehead, *The Aims of Education and Other Essays*, (New York: MacMillan, 1929).

[14] The President's Commission on Higher Education, *Higher Education for American Democracy* (Vol I, "Establishing the Goals") (Washington, D. C.: U.S. Government Printing Office, 1947).

[15] Boyer, op. cit.

[16] Boyer, op. cit., p. 101.

[17] National Institute of Education, op. cit., p. 41.

[18] Association of American Colleges, *Integrity*, op. cit., pp. 30-31.

[19] Although it was not possible to involve all professional fields in The Professional Preparation Network, our membership is reasonably representative of undergraduate professional programs lasting four to six years. We do not specifically address professions such as law, medicine, theology, and dentistry where undergraduate study and professional study usually occur in separate time frames. We do not expect that our recommendations will be directly useful to liberal arts colleges who have made clear decisions to exclude career programs.

[20] J. S. Stark, M. A. Lowther, B. M. K. Hagerty, & C. Orczyk, "A conceptual framework for the study of preservice professional programs in colleges and universities," *Journal of Higher Education* , 1986, *57*(3): 231-258.

[21] Association of American Colleges. *Integrity*, op. cit.

[22] Boyer, op. cit.

[23] J. S. Stark, M. A. Lowther, & B. M. K. Hagerty, "Faculty perceptions of professional preparation environments: Testing a conceptual framework," *Journal of Higher Education* , 1987, *58*(5): 530-561.

[24] J. S. Stark, B. M. K. Hagerty, M. A. Lowther, & P. Lokken, *Professional Liberal Undergraduate Self Study (PLUSS)* (Center for the Study of Higher and Postsecondary Education, Ann Arbor, MI, 1987).

[25] A. N. Whitehead, op. cit.

[26] The President's Commission on Higher Education, *Higher Education for American Democracy* (Vol I, "Establishing the Goals") (Washington, D. C.: U.S. Government Printing Office, 1947).

[27] F. H. T. Rhodes, "Reforming higher education will take more than just tinkering with the curriculum," *The Chronicle of Higher Education* (May 22, 1985).

[28] M. H. Curtis, "Confronting an Academic Dichotomy: A Proposal for Integrating Liberal and Professional Education," *Phi Kappa Phi Journal,* 1985, *65*(3):10-12.

[29] E. J. McGrath, *Liberal Education in the Professions* (New York: Teachers College, Columbia University, Institute of Higher Education, 1959).

[30] The University of Kentucky and Babson College provide specific examples.

[31] Peter Marsh (Ed.), *Contesting the Boundaries of Liberal and Professional Education: The Syracuse Experiment* (Syracuse: Syracuse University Press, forthcoming).

[32] Sienna Heights College, *Ideas Across the Curriculum* (no date).

[33] Association of American Colleges. *Integrity*, op. cit., p. 28.

[34] Frank Newman, *Higher Education and the American Resurgence* (Princeton, NJ: Princton University Press, 1985).

[35] The College Board and Educational Testing Service, *The Academic Profile* (announcement) (Princeton, NJ, 1987).

[36] F. H. T. Rhodes, . . . *Or What's a College For?* (Address delivered at Harvard University, November 13, 1986), pp. 10-12).

Appendix B

PLUSS

Version A
Professional
Program
Faculty

PLUSS©

Professional/Liberal
Undergraduate
Self-Study

A self-study guide for undergraduate program faculty who are discussing how to integrate liberal education goals with professional students' experiences

ppp
The Professional Preparation Project
The University of Michigan

CENTER FOR THE STUDY OF HIGHER AND POSTSECONDARY EDUCATION
Room 2002, School of Education
The University of Michigan
Ann Arbor, Michigan 48109-1259
(313) 764-5522

Form 080087 Rev. 5/11/88

GENERAL INFORMATION

Purpose of PLUSS

The Professional/Liberal Undergraduate Self-Study (PLUSS) helps stimulate discussion within undergraduate professional programs planning to integrate liberal education goals in their students' experiences. PLUSS also provides an organizing framework for professional and liberal studies faculty to identify and mutually resolve issues related to such integration.

PLUSS helps identify common and divergent views and other starting points for discussion. An even wider perspective is gained by collecting the responses of students and recent graduates.

Typically, a decision to use PLUSS as a stimulus to discussion will be made by a particular undergraduate professional program (e.g., nursing, business, architecture). This program will then invite other faculty members concerned with liberal education to join their discussions.

Versions of PLUSS

PLUSS has separate versions for (1) professional program faculty, (2) liberal studies faculty, (3) professional program students, and (4) recent graduates of professional programs. Although parts of each version are in survey form, the responses should be collected informally to stimulate discussion within and between campus groups. The available sections of each version are given in the chart below. Within each version, the sections may be used in any combination.

	Users of PLUSS			
Sections of PLUSS	Professional Program Faculty	Liberal Studies Faculty	Professional Program Students	Professional Program Recent Graduates
I. Survey of Important Liberal/Professional Outcomes	•	•	•	•
II. Identifying Existing Educational Activities That Achieve Outcomes	•	•	•	•
III. Adequacy of Program Discussions	•	•		
IV. Collaboration/Integration Matrix and Discussion Guide	•	•		
V. Indicators of Professional/ Liberal Integration	•	•		
VI. Supports and Barriers Discussion Guide	•	•		

Development and field testing of PLUSS was supported by the Fund for the Improvement of Postsecondary Education and The University of Michigan through the Liberal Outcomes of Professional Study Project. Related background information and assistance in using PLUSS may be obtained from the Professional Preparation Project.

Professional Preparation Program • 2002 SEB, The University of Michigan • Ann Arbor, MI 48109-1259

PART VI

Supports and Barriers Discussion Guide

Purpose: In any attempt to develop cooperative relationships, there will be supports to be used to advantage and barriers to overcome. Frank discussion about how to take advantage of supports and reduce barriers in integrating professional and liberal study may be helpful to you and your colleagues.

Directions: Some possible facilitators and barriers to integrating professional and liberal study are given below. You may wish to add others important in your local context.

Use the scales on the right of each item to answer the questions "Is the item listed strong or weak support, or a strong or weak barrier with respect to efforts to integrate, or is it likely to have no effect?" Then, as a result of group discussion, make notes about actions you will plan.

	SUPPORT		BARRIER		
	STRONG	WEAK	STRONG	WEAK	NO EFFECT
1. University funding	3	2	3	2	1
2. University governance procedures	3	2	3	2	1
3. Program prestige	3	2	3	2	1
4. Student demands	3	2	3	2	1
5. Undeveloped relationships	3	2	3	2	1
6. Program mission	3	2	3	2	1
7. Program personnel	3	2	3	2	1
8. Alumni influence	3	2	3	2	1
9. Professional community reaction	3	2	3	2	1

(Continued on next page)

	SUPPORT		BARRIER		
	STRONG	WEAK	STRONG	WEAK	NO EFFECT
10. Employer reaction	3	2	3	2	1
11. Accreditation standards	3	2	3	2	1
12. Problems with practice settings	3	2	3	2	1
13. Crowded curriculum	3	2	3	2	1
14. University course requirements	3	2	3	2	1
15. Licensing/Certification standards	3	2	3	2	1
16. State regulations	3	2	3	2	1
17. Federal regulations	3	2	3	2	1
18. External funding	3	2	3	2	1
19. Job market	3	2	3	2	1
LOCAL FACTORS					
20. _____	3	2	3	2	1
21. _____	3	2	3	2	1
22. _____	3	2	3	2	1
23. _____	3	2	3	2	1
24. _____	3	2	3	2	1

(Continued on next page)

	SUPPORT		BARRIER		
	STRONG	WEAK	STRONG	WEAK	NO EFFECT
25. _____	3	2	3	2	1
26. _____	3	2	3	2	1
27. _____	3	2	3	2	1
28. _____	3	2	3	2	1
29. _____	3	2	3	2	1
30. _____	3	2	3	2	1

Action Notes about Supports and Barriers

(End of Part VI)

PART V

Indicators of Professional/Liberal Integration

Purpose: This tally sheet is provided to encourage faculty to think of ways to observe, measure, or assess achievement of each of the liberal/professional student outcomes. In general, **cognitive** indicators will be related to the students' knowledge and may be inferred through tests and thinking processes. **Motivational** indicators are related to students' attitudes or feelings and may be inferred through tests or behaviors, while **behavioral** indicators may be observed directly. An outcome may be evidenced by more than one type of indicator.

Directions: In the spaces to the right of each outcome, or on separate sheets, list some measures you could use as outcome indicators at each level of observation. That is, "what are the best ways to know if students have achieved each outcome?" Discuss the ways you record with your professional and liberal education colleagues. Be prepared for some differences of opinion.

	OUTCOME INDICATORS		
	Cognitive	Motivational	Behavioral
LIBERAL/PROFESSIONAL OUTCOMES 1. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.			
2. The graduate understands the societal context (environment) in which the profession is practiced.			
3. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.			

(Continued on next page)

	OUTCOME INDICATORS		
	Cognitive	Motivational	Behavioral
4. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.			
5. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.			
6. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.			
7. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.			
8. The graduate examines issues rationally, logically, and coherently.			

9. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.			
10. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.			
LOCAL PROGRAM OUTCOMES 11.			
12.			
13.			

(Continued on next page)

	OUTCOME INDICATORS		
	Cognitive	Motivational	Behavioral
14.			
15.			
16.			

(End of Part V)

PART IV

Collaboration/Integration Matrix and Discussion Guide

Purpose: Professional and liberal studies faculty could integrate their efforts to help professional students achieve liberal education outcomes in many ways. The matrix presented below is designed to foster consideration of new modes for collaboration among you and your colleagues. By using it in a group discussion setting you can develop answers to the question: "What are the most appropriate types of integration to help students achieve specific important outcomes?"

Directions: Typically, the group already will have used PLUSS, Part I (Survey of Importance of Liberal/Professional Outcomes) to identify important outcomes on which this discussion should focus. Nevertheless, you may wish to have on hand the sheet of **Outcome Definitions** provided in the PLUSS packet, including locally important outcome statements.

Note that the matrix has nine cells defined by three types of coursework structures and three types of learning emphases. Read the "Definition of Matrix Rows and Columns" (page 2) to become familiar with the dimensions of the collaboration/integration matrix. Note that the possibilities represented range from loose collaboration to fully integrated academic programs. Next, identify an important student outcome and then use the definitions and examples of cells in the matrix (pages 3-7) to consider the various integrative possibilities suggested. Then discuss with your colleagues the cells that represent appropriate and feasible ways of integrating educational experiences in your setting.

Since different cells represent appropriate possibilities for different outcomes and for different types of programs, each discussion will be unique. The success of using the matrix will depend upon advance planning by the discussion leader who should be familiar with the matrix as well as the faculty group.

Following initial discussion, you may want to continue them over several weeks by concentrating on one or two outcomes or cells during a single meeting. Alternatively, subcommittees could be formed to discuss and report their deliberations about a particular part of the matrix. The next several pages describe the matrix in detail.

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Program structures ↓ / Teaching/learning emphases →	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(Continued on next page)

Definition of Matrix Rows and Columns

The **rows** in the matrix describe structures for coursework or activities established between fields as follows:

Internal — Coursework or activities that occur within the professional program.

External — Coursework or activities that occur in fields of study outside of the professional program, taught by faculty in other fields.

Collaborative — Coursework or activities (1) taken in other fields but taught by professional program faculty; (2) taken within professional program but taught by faculty from other fields; or (3) taken within a merged or transformed program structure, where two or more fields have united around common goals, themes, or concepts.

The **columns** in the matrix describe teaching and learning emphases within a field of study as follows:

Specialization — Emphasizing the specialized conceptual, technical, and integrative practice components of study in a particular field.

Contextual — Emphasizing knowledge of broad social, political, historical, and economic issues; values; contexts; and the arts.

Investigation — Emphasizing inquiry, analysis, and the search for innovative and creative solutions based on the active use of knowledge of broad social, political, historical, and economic issues; values; contexts; and the arts.

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Teaching/learning emphases → / Program structures ↓	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(Continued on next page)

Possibilities for Integration in Each Cell

Each matrix cell represents different possibilities for integration of academic experiences. In this section, each cell is defined, a brief description of typical arrangements is given, and some specific examples are provided.

Cell I-S: Internal/ Specialization

Coursework or activities within the professional program, taught by faculty prepared in that profession, that focus on the specialized knowledge base of the profession.

Discussion

All professional programs have a large core of activities centered in this cell. These typically are taught by faculty within the professional program with preparation and expertise in that particular professional field. The liberal arts and sciences do not have an obvious role in this part of the curriculum.

Examples

The engineering student studies Civil Engineering I -- Thermodynamics and Materials. Nursing students study Pediatric Nursing, and Nursing Science I, both taught by nursing faculty.

During field work experiences in social work, students combine conceptual knowledge and technical skills in order to practice effectively. Courses are supervised by social work faculty.

Cell E-S: External/ Specialization

Coursework or activities in fields of study outside the professional program, taught by faculty other than professional program faculty, focussing on the specialized knowledge base and practice of the profession.

Discussion

This cell encompasses program requirements that are often, but not necessarily, university-wide requirements. They are often suggested electives or courses required by the program. Because of the blurred boundaries between the knowledge base or skills of the professional field and the external field, traditional competences are covered in some of these courses although they are outside the professional field. Any connections or linkages made to the professional field are typically made by students. There may be no attempt by the professional or liberal arts and sciences faculty to make linkages to the professional field.

Examples

A nursing student is advised to take an elective in Child and Adolescent Psychology because it is closely related to nursing's conceptual knowledge base and practice.

An engineering student is required to take courses in mathematics and physics.

(Continued on next page)

Cell C-S: Collaborative/ Specialization

Coursework or activities: (1) in other fields of study taught by professional program faculty; (2) within the professional program taught by faculty from other fields of study; or (3) within a merged program structure where two or more fields have united around common goals, themes, or concepts. These courses focus on the specialized knowledge base and practice of the profession and the collaborative field.

Discussion

It is assumed that the course, the program, or the class will help the student draw from both fields. There is explicit discussion about the concepts and practices as they relate to both fields. Boundary issues still may exist in terms of the blurring between the specialized conceptual knowledge base and the skill base of each of the collaborating fields, how they overlap, and where they intersect.

Examples

A pharmacy professor teaches a course in pharmacology to nursing students.

An English professor teaches a business writing course to business students.

Cell I-C: Internal/ Contextual

Coursework or activities within the professional program that emphasize knowledge of broad social, political, historical, or economic issues; values; contexts; and the arts as they apply to the understanding and practice of the profession.,

Discussion

It is assumed the faculty teaching these activities, courses and programs are versed in relevant liberal arts and science areas in addition to the professional practice field so that they bring a broad perspective to the coursework or activity. In addition, although students acquire more knowledge about broader topics and issues, they still obtain the perspective on those topics from the profession's viewpoint.

Examples

The nursing student takes a course entitled, "The Nurse in Society."

The pharmacy student takes a course called, "The Economics of Pharmacy Management."

The education student takes a course entitled, "Public Policy and Education."

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Program structure ↓ / Teaching/learning emphases →	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(Continued on next page)

Cell E-C: External/ Contextual

Coursework or activities taken in other fields of study that emphasize knowledge of broad social, political, historical, and economic issues; values; contexts; and the arts.

Discussion

No attempt is made to link the knowledge gained from these classes or courses to the professional field, or vice versa. Linkages must be made by the students, if at all. This cell contains required general education credits, elective credits.

Examples

The business student is required to take 15 general education credits.

The nursing student is required to take a music or art history course.

Cell C-C: Collaborative/ Contextual

Coursework or activities: (1) in other fields of study taught by professional program faculty; (2) within the professional program taught by faculty from other fields of study; or (3) taken within a merged or transformed program structure where two or more fields have united around common goals, themes, or concepts. Here, knowledge of broad social, political, historical, and economic issues; values; contexts; and the arts, is emphasized as it relates to the understanding and practice of the collaborating fields.

Discussion

One important aspect is input from faculty in both fields into the course content and activities. In this type of course activity, the students are getting a broad perspective, not only from the perspective of the professional field, but also from the viewpoint of the collaborating field. Interdisciplinary courses or interdisciplinary programs are good examples of activities in this cell.

Examples

Nursing students take a course on economics of health care, taught by an economist and a nurse.

Business students take a course in law with other law students.

Communication and sociology students take a basic interdisciplinary course entitled, "Interpersonal Relationships in Health Care" taught by a nursing faculty member.

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Program structure ↓ / Teaching/learning emphasis →	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(Continued on next page)

Cell I-I: Internal/ Investigation

Coursework or activities taught within the professional program that emphasize inquiry, questioning, analysis, and the seeking of innovative and creative solutions based on the active use of knowledge of broad social, political, historical, and economic issues; contexts; values; and the arts.

Discussion

Faculty members teaching these types of courses may have advanced education in non-professional fields. The perspective offered in such a course is, however, from the professional viewpoint.

Examples

This cell may include higher-level courses offered within a professional field, such as senior seminars, capstone courses, or research seminars.

Cell E-I: External/ Investigation

Coursework or activities taken in other fields of study that emphasize inquiry, questioning, analysis, and the seeking of innovative and creative solutions based on the active use of knowledge of broad social, political, historical, and economic issues; contexts; values; and the arts.

Discussion

The coursework taken outside of the professional field is not formally linked or connected with the professional courses. Any linkage is usually made by the students.

Examples

A professional field requires a minor in a liberal arts field.

A nursing student may choose a minor in psychology or sociology.

A teacher preparation program requires a major in another field and offers a minor in education.

A senior business student takes a course, "Senior Seminar in Psychology."

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Program structures ↓ / Teaching/learning emphases →	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(Continued on next page)

Cell C-I: Collaborative/ Investigation

Coursework or activities taken: (1) in other fields of study taught by professional program faculty; (2) taught within the professional program by faculty from other fields of study; or (3) taught within a merged or transformed program structure where two or more fields have united around common goals, themes, or concepts. Emphasized here is a spirit of inquiry, questioning, analysis, and the seeking of innovative and creative solutions based on the active use of knowledge of broad social, political, historical, and economic issues; contexts; values; and the arts, as it relates to the understanding and practice of the collaborating fields.

Discussion

The linkages between the collaborating fields are made by the faculty as well as the students. These courses are at a more advanced level than basic courses and reflect a collaborative approach to investigating different issues.

Examples

Students in nursing, pharmacy and economics may be required to take course entitled, "Analysis of Reimbursement Issues in Health Care."

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Program structures ↓ / Teaching/learning emphases →	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(End of Part IV)

PART III

Adequacy of Program Discussions

Purpose: This part of PLUSS stimulates thinking about how frequently certain issues of integrating liberal and professional study are discussed in your program.

Directions: Below is a list of "liberal/professional education outcomes" and some other related items. Use the scale on the left to indicate the extent to which you believe each of the topics has been discussed in your professional program in the last two years.

Use the scale on the right to indicate the extent to which you believe the item merits more discussion.

	EXTENT OF DISCUSSION IN LAST TWO YEARS			HOW MUCH DISCUSSION IS NEEDED?		
	None	Some	Much	Less	About the Same	More
LIBERAL/PROFESSIONAL OUTCOMES						
1. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.	1	2	3	1	2	3
2. The graduate understands the societal context (environment) in which the profession is practiced.	1	2	3	1	2	3
3. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.	1	2	3	1	2	3
4. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.	1	2	3	1	2	3
5. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.	1	2	3	1	2	3

(Continued on next page)

	EXTENT OF DISCUSSION IN LAST TWO YEARS			HOW MUCH DISCUSSION IS NEEDED?		
	None	Some	Much	Less	About the Same	More
6. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.	1	2	3	1	2	3
7. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.	1	2	3	1	2	3
8. The graduate examines issues rationally, logically, and coherently.	1	2	3	1	2	3
9. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.	1	2	3	1	2	3
10. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.	1	2	3	1	2	3
11. The balance of theory and practice to be included in the program.	1	2	3	1	2	3
12. The function and nature of practica or field experiences.	1	2	3	1	2	3
13. The content of the professional knowledge base.	1	2	3	1	2	3
14. The content of foundational studies in fields on which the professional knowledge base builds.	1	2	3	1	2	3

(Continued on next page)

	EXTENT OF DISCUSSION IN LAST TWO YEARS			HOW MUCH DISCUSSION IS NEEDED?		
	None	Some	Much	Less	About the Same	More
15. The content of supporting studies in liberal or general education.	1	2	3	1	2	3
16. Integrating foundational studies with professional coursework.	1	2	3	1	2	3
17. Integrating liberal or general studies with professional coursework.	1	2	3	1	2	3
18. Courses **within** a professional program that emphasize inquiry, analysis, and the search for innovative solutions to problems.	1	2	3	1	2	3
19. Courses **outside** of a professional program that emphasize inquiry, analysis, and the search for innovative solutions to problems.	1	2	3	1	2	3
OTHER OUTCOMES OR DISCUSSIONS:						
20. _____ _____ _____ _____	1	2	3	1	2	3
21. _____ _____ _____ _____	1	2	3	1	2	3
22. _____ _____ _____ _____	1	2	3	1	2	3

(Continued on next page)

	EXTENT OF DISCUSSION IN LAST TWO YEARS			HOW MUCH DISCUSSION IS NEEDED?		
	None	Some	Much	Less	About the Same	More
23. _____	1	2	3	1	2	3
24. _____	1	2	3	1	2	3
25. _____	1	2	3	1	2	3

(End of Part III)

PART II

Identifying Existing Educational Activities That Achieve Outcomes

Purpose: To expand your discussion of the emphasis currently placed on each liberal/professional outcome in your program, it is useful to identify specific activities the faculty believe are intended to achieve the outcome. This exercise may reveal relatively unknown activities. It may also provide a basis for discussion of activities that need clarification. If a parallel response is obtained from liberal education faculty, some common interests and activities may be identified.

Directions: For each of the "liberal/professional education outcomes," please describe briefly the educational activities in each category that you believe help students in your program achieve the outcome. Some typical categories of formal and informal educational activities are provided. The matrix below is, of course, only a guide. You may wish to provide separate sheets or discussions for each cell in the matrix or to omit cells that are not relevant.

LIBERAL/PROFESSIONAL OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
1. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.					
2. The graduate understands the societal context (environment) in which the profession is practiced.					

(Continued on next page)

LIBERAL/PROFESSIONAL OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
3. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.					
4. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.					
5. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.					
6. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.					

7. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.					
8. The graduate examines issues rationally, logically, and coherently.					
9. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.					
10. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.					

(Continue on back for local outcomes)

LOCAL PROGRAM OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
11.					
12.					
13.					
14.					
15.					
16.					

(End of Part II)

PART I

Survey of Importance of Liberal/Professional Outcomes

Purpose: (1) To ascertain which outcomes faculty members in professional programs believe are most important for their students,

(2) To estimate the degree of emphasis faculty members believe the program currently places on these outcomes.

Using results from the parallel survey for liberal studies faculty, it is possible to compare and discuss two perspectives on the importance of the outcomes. Other versions of the instrument may also be used to compare the extent to which faculty, current students, and recent graduates believe the outcomes are emphasized.

Survey responses may be tallied and discussed in a manner convenient to the cooperating professional and liberal studies programs.

Directions: For each item listed below, circle the number that indicates the **ideal** amount of emphasis that you believe your program should place on each outcome. Then circle a second number to indicate the **actual** amount of emphasis currently placed on the outcome.

1. IDEAL: How much emphasis do you believe **ideally** should be placed on each outcome when preparing undergraduate students in your professional field? That is, how important is it that graduates who accept their first professional position possess each competence or quality listed below.

2. OUR PROGRAM: How much emphasis do you believe each outcome **actually receives** in your professional program?

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
PROFESSIONAL COMPETENCES								
1. The graduate understands the body of knowledge basic to practice of the profession: the theoretical base or the professional knowledge base.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
2. The graduate can perform the fundamental skills or tasks required in professional practice.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
3. The graduate can integrate theory and practice, that is, select the knowledge and skills applicable to a particular professional work setting or problem.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
4. The graduate not only meets basic standards for entrance into the profession but is a competitive applicant for a beginning position.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
LIBERAL/PROFESSIONAL OUTCOMES								
5. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
6. The graduate understands the societal context (environment) in which the profession is practiced.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
7. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
8. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
9. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
10. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
11. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
12. The graduate examines issues rationally, logically, and coherently.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
13. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
14. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
IMPORTANT LOCAL PROGRAM OUTCOMES								
15. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
16. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
17. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis → Heavy Emphasis
18. _____	IDEAL:	1 2 3 4 5 6 7
	OUR PROGRAM:	1 2 3 4 5 6 7
19. _____	IDEAL:	1 2 3 4 5 6 7
	OUR PROGRAM:	1 2 3 4 5 6 7
20. _____	IDEAL:	1 2 3 4 5 6 7
	OUR PROGRAM:	1 2 3 4 5 6 7

(End of Part I)

Outcomes Important to Educators in Eight Undergraduate Professional Fields*

PLUSS stimulates discussions about integrating liberal and professional study by posing for consideration a set of potentially important student outcomes.

The particular set of liberal/professional outcomes included in PLUSS was originally derived from literature in professional fields. Next, faculty members in professional programs nationally were surveyed and rated these outcomes as very important for their graduates to achieve. Subsequently, the set was expanded, refined, and field-tested during 1986 by pairs of professional program and liberal arts faculty from several colleges and universities. For easy reference, these outcomes are provided in this insert.

PLUSS is based on two sets of broad student outcomes:

Traditional Professional Competence	Outcomes frequently considered primary goals of professional preparation in college.
Liberal/Professional Education Outcomes	Outcomes encompassing goals of liberal education but phrased in terms especially relevant to graduates who prepare for professional positions.

The two sets of outcomes can be viewed as overlapping realms (see figure below). The liberal/professional outcomes express common goals for students endorsed by both professional and liberal educators. Because most colleges and professional programs may find that some desired outcomes are not covered in this list, PLUSS provides space to add other locally valued outcomes.

(Continued on next page)

Outcomes Important to Educators in Eight Undergraduate Professional Fields*

Traditional Professional Outcomes

Conceptual Competence — The graduate understands the theoretical foundations of the profession.

Technical Competence — The graduate can perform skills required of the professional.

Integrative Competence — The graduate can integrate theory and skills in the practice setting.

Career Marketability — The graduate has superior employment opportunities because of acquired training.

Professional Outcomes in Common with Liberal Education

Communication Competence — The graduate can read, write, speak, and listen effectively to acquire, develop, and convey ideas and information.

Reading, writing, speaking, and listening are skills essential to professional practice and to continued professional growth as well as to informed citizenry and continued personal growth.

Critical Thinking — The graduate examines issues rationally, logically, and coherently.

Although critical thinking is a universally desired educational outcome, professionals particularly need a repertoire of thinking strategies that will enable them to acquire, evaluate, and perhaps produce information and knowledge. Since much professional practice is problematical, students need to develop analytical skills to make decisions in both familiar and unfamiliar circumstances.

Contextual Competence — The graduate understands the societal context (environment) in which the profession is practiced.

The capability to adopt multiple perspectives allows the graduate to comprehend the complex interdependence between the profession and society. An enlarged understanding of the world and the ability to make judgments in light of historical, social, economic, scientific, and political realities is demanded of the professional as well as the citizen.

(Continued on next page)

*Architecture, business administration, education, engineering, journalism, nursing, pharmacy, social work

Aesthetic Sensibility

The graduate will have an enhanced aesthetic awareness of the arts and human behavior for both personal enrichment and application in enhancement of the profession.

Sensitivity to relationships among the arts, the natural environment, and human concerns epitomizes aesthetic awareness. Through learning to approach life as an aesthetic experience and by viewing work as an act of aesthetic judgment, professionals can more effectively assess and understand the world and their roles within it.

Professional Identity

The graduate acknowledges and is concerned with improving the knowledge, skills, and values of the profession.

Professional identity both parallels and supplements the liberal education goal of developing a sense of personal identity. The sense of personal worth and self-confidence that develops from experiencing success in professional practice, often including contributing or altruistic relationships with clients, is an effective vehicle for gaining a sense of one's place in the world as an individual and citizen.

Professional Ethics

The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.

Liberally educated individuals are expected to have developed value systems and ethical standards that guide their behavior. Since in every field professionals face choices and responsibility in the process of making decisions with full understanding of their consequences, the study of ethics provides a context for developing professional ethics.

Adaptive Competence

The graduate anticipates, adapts to, and promotes changes important to the profession's societal purpose and the professional's role.

A liberally educated person has an enhanced capacity to adapt and to anticipate changes in society. Since professional practice is not static, adaptability can be fostered by promoting the need to detect and respond to changes and make innovations in professional practice.

Leadership Capacity

The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.

All education carries with it the responsibility of developing leadership capacity. This is particularly true for professional education where the problem-decision-action cycle may have broad environmental, social, and individual ramifications. Not only does leadership imply both functional and status obligations, it requires the intelligent, humane application of knowledge and skills.

(Continued on next page)

Scholarly Concern for Improvement

The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.

The heart of the intellectual process is attention to a spirit of inquiry, critical analysis, or logical thinking. Although many critical analysis skills are developed as theory and practice are integrated, the professional curriculum can be specially designed to foster among graduates an obligation to participate in inquiry, research, and improvement of the profession.

Motivation for Continued Learning

The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.

A truly educated person will wish to continue learning throughout life. In professional education, substantial emphasis can be placed on fostering individual responsibility for continued professional growth.

Important Local Program Outcomes

Different colleges may hold unique outcomes for their graduates. Extra spaces in PLUSS provide an opportunity for you to state six additional outcomes.

Outcome	Definition

(End of Outcome Definitions)

Version B
Liberal
Studies
Faculty

PLUSS©

Professional/Liberal
Undergraduate
Self-Study

A self-study guide for undergraduate program faculty who are discussing how to integrate liberal education goals with professional students' experiences

ppp
The Professional Preparation Project
The University of Michigan

CENTER FOR THE STUDY OF HIGHER AND POSTSECONDARY EDUCATION
Room 2002, School of Education
The University of Michigan
Ann Arbor, Michigan 48109-1259
(313) 764-5522

Form 040087 Rev. 5/11/88

GENERAL INFORMATION

Purpose of PLUSS

The Professional/Liberal Undergraduate Self-Study (PLUSS) helps stimulate discussion within undergraduate professional programs planning to integrate liberal education goals in their students' experiences. PLUSS also provides an organizing framework for professional and liberal studies faculty to identify and mutually resolve issues related to such integration.

PLUSS helps identify common and divergent views and other starting points for discussion. An even wider perspective is gained by collecting the responses of students and recent graduates.

Typically, a decision to use PLUSS as a stimulus to discussion will be made by a particular undergraduate professional program (e.g., nursing, business, architecture). This program will then invite other faculty members concerned with liberal education to join their discussions.

Versions of PLUSS

PLUSS has separate versions for (1) professional program faculty, (2) liberal studies faculty, (3) professional program students, and (4) recent graduates of professional programs. Although parts of each version are in survey form, the responses should be collected informally to stimulate discussion within and between campus groups. The available sections of each version are given in the chart below. Within each version, the sections may be used in any combination.

	Users of PLUSS			
Sections of PLUSS	Professional Program Faculty	Liberal Studies Faculty	Professional Program Students	Professional Program Recent Graduates
I. Survey of Important Liberal/Professional Outcomes	•	•	•	•
II. Identifying Existing Educational Activities That Achieve Outcomes	•	•	•	•
III. Adequacy of Program Discussions	•	•		
IV. Collaboration/Integration Matrix and Discussion Guide	•	•		
V. Indicators of Professional/ Liberal Integration	•	•		
VI. Supports and Barriers Discussion Guide	•	•		

Development and field testing of PLUSS was supported by the Fund for the Improvement of Postsecondary Education and The University of Michigan through the Liberal Outcomes of Professional Study Project. Related background information and assistance in using PLUSS may be obtained from the Professional Preparation Project.

Professional Preparation Program • 2002 SEB, The University of Michigan • Ann Arbor, MI 48109-1259

Outcomes Important to Educators in Eight Undergraduate Professional Fields*

PLUSS stimulates discussions about integrating liberal and professional study by posing for consideration a set of potentially important student outcomes.

The particular set of liberal/professional outcomes included in PLUSS was originally derived from literature in professional fields. Next, faculty members in professional programs nationally were surveyed and rated these outcomes as very important for their graduates to achieve. Subsequently, the set was expanded, refined, and field-tested during 1986 by pairs of professional program and liberal arts faculty from several colleges and universities. For easy reference, these outcomes are provided in this insert.

PLUSS is based on two sets of broad student outcomes:

Traditional Professional Competence	Outcomes frequently considered primary goals of professional preparation in college.
Liberal/Professional Education Outcomes	Outcomes encompassing goals of liberal education but phrased in terms especially relevant to graduates who prepare for professional positions.

The two sets of outcomes can be viewed as overlapping realms (see figure below). The liberal/professional outcomes express common goals for students endorsed by both professional and liberal educators. Because most colleges and professional programs may find that some desired outcomes are not covered in this list, PLUSS provides space to add other locally valued outcomes.

(Continued on next page)

Outcomes Important to Educators in Eight Undergraduate Professional Fields*

Traditional Professional Outcomes

Conceptual Competence — The graduate understands the theoretical foundations of the profession.

Technical Competence — The graduate can perform skills required of the professional.

Integrative Competence — The graduate can integrate theory and skills in the practice setting.

Career Marketability — The graduate has superior employment opportunities because of acquired training.

Professional Outcomes in Common with Liberal Education

Communication Competence — The graduate can read, write, speak, and listen effectively to acquire, develop, and convey ideas and information.

Reading, writing, speaking, and listening are skills essential to professional practice and to continued professional growth as well as to informed citizenry and continued personal growth.

Critical Thinking — The graduate examines issues rationally, logically, and coherently.

Although critical thinking is a universally desired educational outcome, professionals particularly need a repertoire of thinking strategies that will enable them to acquire, evaluate, and perhaps produce information and knowledge. Since much professional practice is problematical, students need to develop analytical skills to make decisions in both familiar and unfamiliar circumstances.

Contextual Competence — The graduate understands the societal context (environment) in which the profession is practiced.

The capability to adopt multiple perspectives allows the graduate to comprehend the complex interdependence between the profession and society. An enlarged understanding of the world and the ability to make judgments in light of historical, social, economic, scientific, and political realities is demanded of the professional as well as the citizen.

(Continued on next page)

*Architecture, business administration, education, engineering, journalism, nursing, pharmacy, social work

Aesthetic Sensibility

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Sensitivity to relationships among the arts, the natural environment, and human concerns epitomizes aesthetic awareness. Through learning to approach life as an aesthetic experience and by viewing work as an act of aesthetic judgment, professionals can more effectively assess and understand the world and their roles within it.

Professional Identity

The graduate acknowledges and is concerned with improving the knowledge, skills, and values of the profession.

Professional identity both parallels and supplements the liberal education goal of developing a sense of personal identity. The sense of personal worth and self-confidence that develops from experiencing success in professional practice, often including contributing or altruistic relationships with clients, is an effective vehicle for gaining a sense of one's place in the world as an individual and citizen.

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(Continued on next page)

Scholarly Concern for Improvement

The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.

The heart of the intellectual process is attention to a spirit of inquiry, critical analysis, or logical thinking. Although many critical analysis skills are developed as theory and practice are integrated, the professional curriculum can be specially designed to foster among graduates an obligation to participate in inquiry, research, and improvement of the profession.

Motivation for Continued Learning

The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.

A truly educated person will wish to continue learning throughout life. In professional education, substantial emphasis can be placed on fostering individual responsibility for continued professional growth.

Important Local Program Outcomes

Different colleges may hold unique outcomes for their graduates. Extra spaces in PLUSS provide an opportunity for you to state six additional outcomes.

Outcome	Definition

(End of Outcome Definitions)

PART I

Survey of Importance of Liberal/Professional Outcomes

Purpose: (1) To ascertain which outcomes faculty members in liberal arts and sciences believe are most important for professional program students,

(2) To estimate the degree of emphasis faculty members in liberal arts and sciences believe the professional program currently places on these outcomes.

Using results from the parallel survey for professional program faculty, it is possible to compare and discuss two perspectives on the importance of the outcomes. Other versions of the instrument may also be used to compare the extent to which faculty, current students, and recent graduates believe the outcomes are emphasized.

Survey responses may be tallied and discussed in a manner convenient to the cooperating professional and liberal studies programs.

Directions: For each item listed below, circle the number that indicates the **ideal** amount of emphasis that you believe the professional program should place on each outcome. Then circle a second number to indicate the **actual** amount of emphasis you believe that professional program currently places on the outcome.

1. IDEAL: How much emphasis do you, as a liberal arts faculty member, believe **ideally** should be placed on each outcome when preparing undergraduate students in the professional field that has asked your cooperation in completing this survey? That is, how important is it that graduates who accept their first professional position possess each competence or quality listed below?

2. OUR PROGRAM: How much emphasis do you believe each outcome **actually receives** in the relevant local professional program?

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
PROFESSIONAL COMPETENCES								
1. The graduate understands the body of knowledge basic to practice of the profession: the theoretical base or the professional knowledge base.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
2. The graduate can perform the fundamental skills or tasks required in professional practice.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
3. The graduate can integrate theory and practice, that is, select the knowledge and skills applicable to a particular professional work setting or problem.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
4. The graduate not only meets basic standards for entrance into the profession but is a competitive applicant for a beginning position.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
LIBERAL/PROFESSIONAL OUTCOMES								
5. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
6. The graduate understands the societal context (environment) in which the profession is practiced.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
7. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
8. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
9. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
10. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
11. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
12. The graduate examines issues rationally, logically, and coherently.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
13. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
14. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
IMPORTANT LOCAL PROGRAM OUTCOMES								
15. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
16. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
17. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
18. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
19. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
20. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(End of Part I)

PART II

Identifying Existing Educational Activities That Achieve Outcomes

Purpose: To expand your discussion of the emphasis currently placed on each liberal/professional outcome on your campus, it is useful to identify specific activities that faculty believe are intended to achieve the outcome. This exercise may reveal relatively unknown activities in both professional programs and supporting liberal arts fields.. It may also provide a basis for discussion of activities that need clarification.

Directions: For each of the "liberal/professional education outcomes," please describe briefly the educational activities in each category that you believe help undergraduate students on your campus achieve the outcome. Some typical categories of formal and informal educational activities are provided. The matrix below is only a guide. You may wish to provide separate sheets or discussions for each cell in the matrix or to omit cells that are not relevant.

LIBERAL/PROFESSIONAL OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
1. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.					
2. The graduate understands the societal context (environment) in which the profession is practiced.					

(Continued on next page)

LIBERAL/PROFESSIONAL OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
3. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.					
4. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.					
5. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.					
6. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.					

7. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.					
8. The graduate examines issues rationally, logically, and coherently.					
9. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.					
10. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.					

(Continue on back for local outcomes)

LOCAL PROGRAM OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
11.					
12.					
13.					
14.					
15.					
16.					

(End of Part II)

PART III

Adequacy of Program Discussions

Purpose: This part of PLUSS stimulates thinking about how frequently certain issues of integrating liberal and professional study are discussed in your program.

Directions: Below is a list of "liberal/professional education outcomes" and some other related items. Use the scale on the left to indicate the extent to which you believe each of the topics has been discussed in your professional program in the last two years.

Use the scale on the right to indicate the extent to which you believe the item merits more discussion.

	EXTENT OF DISCUSSION IN LAST TWO YEARS			HOW MUCH DISCUSSION IS NEEDED?		
	None	Some	Much	Less	About the Same	More
LIBERAL/PROFESSIONAL OUTCOMES						
1. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.	1	2	3	1	2	3
2. The graduate understands the societal context (environment) in which the profession is practiced.	1	2	3	1	2	3
3. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.	1	2	3	1	2	3
4. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.	1	2	3	1	2	3
5. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.	1	2	3	1	2	3

(Continued on next page)

	EXTENT OF DISCUSSION IN LAST TWO YEARS			HOW MUCH DISCUSSION IS NEEDED?		
	None	Some	Much	Less	About the Same	More
6. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.	1	2	3	1	2	3
7. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.	1	2	3	1	2	3
8. The graduate examines issues rationally, logically, and coherently.	1	2	3	1	2	3
9. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.	1	2	3	1	2	3
10. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.	1	2	3	1	2	3
11. The balance of theory and practice to be included in the program.	1	2	3	1	2	3
12. The function and nature of practica or field experiences.	1	2	3	1	2	3
13. The content of the professional knowledge base.	1	2	3	1	2	3
14. The content of foundational studies in fields on which the professional knowledge base builds.	1	2	3	1	2	3

(Continued on next page)

	EXTENT OF DISCUSSION IN LAST TWO YEARS			HOW MUCH DISCUSSION IS NEEDED?		
	None	Some	Much	Less	About the Same	More
15. The content of supporting studies in liberal or general education.	1	2	3	1	2	3
16. Integrating foundational studies with professional coursework.	1	2	3	1	2	3
17. Integrating liberal or general studies with professional coursework.	1	2	3	1	2	3
18. Courses **within** a professional program that emphasize inquiry, analysis, and the search for innovative solutions to problems.	1	2	3	1	2	3
19. Courses **outside** of a professional program that emphasize inquiry, analysis, and the search for innovative solutions to problems.	1	2	3	1	2	3
OTHER OUTCOMES OR DISCUSSIONS:						
20. _____ _____ _____ _____	1	2	3	1	2	3
21. _____ _____ _____ _____	1	2	3	1	2	3
22. _____ _____ _____ _____	1	2	3	1	2	3

(Continued on next page)

	EXTENT OF DISCUSSION IN LAST TWO YEARS			HOW MUCH DISCUSSION IS NEEDED?		
	None	Some	Much	Less	About the Same	More
23. _____	1	2	3	1	2	3
24. _____	1	2	3	1	2	3
25. _____	1	2	3	1	2	3

(End of Part III)

PART IV

Collaboration/Integration Matrix and Discussion Guide

Purpose: Professional and liberal studies faculty could integrate their efforts to help professional students achieve liberal education outcomes in many ways. The matrix presented below is designed to foster consideration of new modes for collaboration among you and your colleagues. By using it in a group discussion setting you can develop answers to the question: "What are the most appropriate types of integration to help students achieve specific important outcomes?"

Directions: Typically, the group already will have used PLUSS, Part I (Survey of Importance of Liberal/Professional Outcomes) to identify important outcomes on which this discussion should focus. Nevertheless, you may wish to have on hand the sheet of **Outcome Definitions** provided in the PLUSS packet, including locally important outcome statements.

Note that the matrix has nine cells defined by three types of coursework structures and three types of learning emphases. Read the "Definition of Matrix Rows and Columns" (page 2) to become familiar with the dimensions of the collaboration/integration matrix. Note that the possibilities represented range from loose collaboration to fully integrated academic programs. Next, identify an important student outcome and then use the definitions and examples of cells in the matrix (pages 3-7) to consider the various integrative possibilities suggested. Then discuss with your colleagues the cells that represent appropriate and feasible ways of integrating educational experiences in your setting.

Since different cells represent appropriate possibilities for different outcomes and for different types of programs, each discussion will be unique. The success of using the matrix will depend upon advance planning by the discussion leader who should be familiar with the matrix as well as the faculty group.

Following initial discussion, you may want to continue them over several weeks by concentrating on one or two outcomes or cells during a single meeting. Alternatively, subcommittees could be formed to discuss and report their deliberations about a particular part of the matrix. The next several pages describe the matrix in detail.

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Program structures ↓ / Teaching/learning emphases →	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(Continued on next page)

Definition of Matrix Rows and Columns

The **rows** in the matrix describe structures for coursework or activities established between fields as follows:

Internal — Coursework or activities that occur within the professional program.

External — Coursework or activities that occur in fields of study outside of the professional program, taught by faculty in other fields.

Collaborative — Coursework or activities (1) taken in other fields but taught by professional program faculty; (2) taken within professional program but taught by faculty from other fields; or (3) taken within a merged or transformed program structure, where two or more fields have united around common goals, themes, or concepts.

The **columns** in the matrix describe teaching and learning emphases within a field of study as follows:

Specialization — Emphasizing the specialized conceptual, technical, and integrative practice components of study in a particular field.

Contextual — Emphasizing knowledge of broad social, political, historical, and economic issues; values; contexts; and the arts.

Investigation — Emphasizing inquiry, analysis, and the search for innovative and creative solutions based on the active use of knowledge of broad social, political, historical, and economic issues; values; contexts; and the arts.

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Teaching/learning emphases → / Program structures ↓	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(Continued on next page)

Possibilities for Integration in Each Cell

Each matrix cell represents different possibilities for integration of academic experiences. In this section, each cell is defined, a brief description of typical arrangements is given, and some specific examples are provided.

Cell I-S: Internal/ Specialization

Coursework or activities within the professional program, taught by faculty prepared in that profession, that focus on the specialized knowledge base of the profession.

Discussion

All professional programs have a large core of activities centered in this cell. These typically are taught by faculty within the professional program with preparation and expertise in that particular professional field. The liberal arts and sciences do not have an obvious role in this part of the curriculum.

Examples

The engineering student studies Civil Engineering I -- Thermodynamics and Materials. Nursing students study Pediatric Nursing, and Nursing Science I, both taught by nursing faculty.

During field work experiences in social work, students combine conceptual knowledge and technical skills in order to practice effectively. Courses are supervised by social work faculty.

Cell E-S: External/ Specialization

Coursework or activities in fields of study outside the professional program, taught by faculty other than professional program faculty, focussing on the specialized knowledge base and practice of the profession.

Discussion

This cell encompasses program requirements that are often, but not necessarily, university-wide requirements. They are often suggested electives or courses required by the program. Because of the blurred boundaries between the knowledge base or skills of the professional field and the external field, traditional competences are covered in some of these courses although they are outside the professional field. Any connections or linkages made to the professional field are typically made by students. There may be no attempt by the professional or liberal arts and sciences faculty to make linkages to the professional field.

Examples

A nursing student is advised to take an elective in Child and Adolescent Psychology because it is closely related to nursing's conceptual knowledge base and practice.

An engineering student is required to take courses in mathematics and physics.

(Continued on next page)

Cell C-S: Collaborative/ Specialization

Coursework or activities: (1) in other fields of study taught by professional program faculty; (2) within the professional program taught by faculty from other fields of study; or (3) within a merged program structure where two or more fields have united around common goals, themes, or concepts. These courses focus on the specialized knowledge base and practice of the profession and the collaborative field.

Discussion

It is assumed that the course, the program, or the class will help the student draw from both fields. There is explicit discussion about the concepts and practices as they relate to both fields. Boundary issues still may exist in terms of the blurring between the specialized conceptual knowledge base and the skill base of each of the collaborating fields, how they overlap, and where they intersect.

Examples

A pharmacy professor teaches a course in pharmacology to nursing students.

An English professor teaches a business writing course to business students.

Cell I-C: Internal/ Contextual

Coursework or activities within the professional program that emphasize knowledge of broad social, political, historical, or economic issues; values; contexts; and the arts as they apply to the understanding and practice of the profession.,

Discussion

It is assumed the faculty teaching these activities, courses and programs are versed in relevant liberal arts and science areas in addition to the professional practice field so that they bring a broad perspective to the coursework or activity. In addition, although students acquire more knowledge about broader topics and issues, they still obtain the perspective on those topics from the profession's viewpoint.

Examples

The nursing student takes a course entitled, "The Nurse in Society."

The pharmacy student takes a course called, "The Economics of Pharmacy Management."

The education student takes a course entitled, "Public Policy and Education."

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Program structures ↓ / Teaching/learning emphases →	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(Continued on next page)

Cell E-C: External/ Contextual

Coursework or activities taken in other fields of study that emphasize knowledge of broad social, political, historical, and economic issues; values; contexts; and the arts.

Discussion

No attempt is made to link the knowledge gained from these classes or courses to the professional field, or vice versa. Linkages must be made by the students, if at all. This cell contains required general education credits, elective credits.

Examples

The business student is required to take 15 general education credits.

The nursing student is required to take a music or art history course.

Cell C-C: Collaborative/ Contextual

Coursework or activities: (1) in other fields of study taught by professional program faculty; (2) within the professional program taught by faculty from other fields of study; or (3) taken within a merged or transformed program structure where two or more fields have united around common goals, themes, or concepts. Here, knowledge of broad social, political, historical, and economic issues; values; contexts; and the arts, is emphasized as it relates to the understanding and practice of the collaborating fields.

Discussion

One important aspect is input from faculty in both fields into the course content and activities. In this type of course activity, the students are getting a broad perspective, not only from the perspective of the professional field, but also from the viewpoint of the collaborating field. Interdisciplinary courses or interdisciplinary programs are good examples of activities in this cell.

Examples

Nursing students take a course on economics of health care, taught by an economist and a nurse.

Business students take a course in law with other law students.

Communication and sociology students take a basic interdisciplinary course entitled, "Interpersonal Relationships in Health Care" taught by a nursing faculty member.

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Program structures ↓ / Teaching/learning emphases →	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(Continued on next page)

Cell I-I: Internal/ Investigation

Coursework or activities taught within the professional program that emphasize inquiry, questioning, analysis, and the seeking of innovative and creative solutions based on the active use of knowledge of broad social, political, historical, and economic issues; contexts; values; and the arts.

Discussion

Faculty members teaching these types of courses may have advanced education in non-professional fields. The perspective offered in such a course is, however, from the professional viewpoint.

Examples

This cell may include higher-level courses offered within a professional field, such as senior seminars, capstone courses, or research seminars.

Cell E-I: External/ Investigation

Coursework or activities taken in other fields of study that emphasize inquiry, questioning, analysis, and the seeking of innovative and creative solutions based on the active use of knowledge of broad social, political, historical, and economic issues; contexts; values; and the arts.

Discussion

The coursework taken outside of the professional field is not formally linked or connected with the professional courses. Any linkage is usually made by the students.

Examples

A professional field requires a minor in a liberal arts field.

A nursing student may choose a minor in psychology or sociology.

A teacher preparation program requires a major in another field and offers a minor in education.

A senior business student takes a course, "Senior Seminar in Psychology."

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Teaching/learning emphases → / Program structures ↓	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(Continued on next page)

Cell C-I: Collaborative/ Investigation

Coursework or activities taken: (1) in other fields of study taught by professional program faculty; (2) taught within the professional program by faculty from other fields of study; or (3) taught within a merged or transformed program structure where two or more fields have united around common goals, themes, or concepts. Emphasized here is a spirit of inquiry, questioning, analysis, and the seeking of innovative and creative solutions based on the active use of knowledge of broad social, political, historical, and economic issues; contexts; values; and the arts, as it relates to the understanding and practice of the collaborating fields.

Discussion

The linkages between the collaborating fields are made by the faculty as well as the students. These courses are at a more advanced level than basic courses and reflect a collaborative approach to investigating different issues.

Examples

Students in nursing, pharmacy and economics may be required to take course entitled, "Analysis of Reimbursement Issues in Health Care."

A CONCEPTUAL FRAMEWORK FOR INTEGRATING LIBERAL AND PROFESSIONAL LEARNING

Program structures ↓ / Teaching/learning emphases →	Specialization	Contextual	Investigation
Internal	I-S	I-C	I-I
External	E-S	E-C	E-I
Collaborative	C-S	C-C	C-I

(End of Part IV)

PART V

Indicators of Professional/Liberal Integration

Purpose: This tally sheet is provided to encourage faculty to think of ways to observe, measure, or assess achievement of each of the liberal/professional student outcomes. In general, **cognitive** indicators will be related to the students' knowledge and may be inferred through tests and thinking processes. **Motivational** indicators are related to students' attitudes or feelings and may be inferred through tests or behaviors, while **behavioral** indicators may be observed directly. An outcome may be evidenced by more than one type of indicator.

Directions: In the spaces to the right of each outcome, or on separate sheets, list some measures you could use as outcome indicators at each level of observation. That is, "what are the best ways to know if students have achieved each outcome?" Discuss the ways you record with your professional and liberal education colleagues. Be prepared for some differences of opinion.

	OUTCOME INDICATORS		
	Cognitive	Motivational	Behavioral
LIBERAL/PROFESSIONAL OUTCOMES			
1. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.			
2. The graduate understands the societal context (environment) in which the profession is practiced.			
3. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.			

(Continued on next page)

	OUTCOME INDICATORS		
	Cognitive	Motivational	Behavioral
4. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.			
5. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.			
6. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.			
7. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.			
8. The graduate examines issues rationally, logically, and coherently.			

9. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.			
10. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.			
LOCAL PROGRAM OUTCOMES 11.			
12.			
13.			

(Continued on next page)

	OUTCOME INDICATORS		
	Cognitive	Motivational	Behavioral
14.			
15.			
16.			

(End of Part V)

PART VI

Supports and Barriers Discussion Guide

Purpose: In any attempt to develop cooperative relationships, there will be supports to be used to advantage and barriers to overcome. Frank discussion about how to take advantage of supports and reduce barriers in integrating professional and liberal study may be helpful to you and your colleagues.

Directions: Some possible facilitators and barriers to integrating professional and liberal study are given below. You may wish to add others important in your local context.

Use the scales on the right of each item to answer the questions "Is the item listed strong or weak support, or a strong or weak barrier with respect to efforts to integrate, or is it likely to have no effect?" Then, as a result of group discussion, make notes about actions you will plan.

	SUPPORT		BARRIER		
	STRONG	WEAK	STRONG	WEAK	NO EFFECT
1. University funding	3	2	3	2	1
2. University governance procedures	3	2	3	2	1
3. Program prestige	3	2	3	2	1
4. Student demands	3	2	3	2	1
5. Undeveloped relationships	3	2	3	2	1
6. Program mission	3	2	3	2	1
7. Program personnel	3	2	3	2	1
8., Alumni influence	3	2	3	2	1
9. Professional community reaction	3	2	3	2	1

(Continued on next page)

	SUPPORT		BARRIER		
	STRONG	WEAK	STRONG	WEAK	NO EFFECT
10. Employer reaction	3	2	3	2	1
11. Accreditation standards	3	2	3	2	1
12. Problems with practice settings	3	2	3	2	1
13. Crowded curriculum	3	2	3	2	1
14. University course requirements	3	2	3	2	1
15. Licensing/Certification standards	3	2	3	2	1
16. State regulations	3	2	3	2	1
17. Federal regulations	3	2	3	2	1
18. External funding	3	2	3	2	1
19. Job market	3	2	3	2	1
LOCAL FACTORS					
20. _____	3	2	3	2	1
21. _____	3	2	3	2	1
22. _____	3	2	3	2	1
23. _____	3	2	3	2	1
24. _____	3	2	3	2	1

Continued on next page)

	SUPPORT		BARRIER		
	STRONG	WEAK	STRONG	WEAK	NO EFFECT
25. _____	3	2	3	2	1
26. _____	3	2	3	2	1
27. _____	3	2	3	2	1
28. _____	3	2	3	2	1
29. _____	3	2	3	2	1
30. _____	3	2	3	2	1

Action Notes about Supports and Barriers

(End of Part VI)

Version C
Professional
Program
Students

PLUSS©

Professional/Liberal
Undergraduate
Self-Study

A self-study guide for undergraduate programs that are
discussing how to integrate liberal education goals
with professional students' experiences

ppp
The Professional Preparation Project
The University of Michigan

CENTER FOR THE STUDY OF HIGHER AND POSTSECONDARY EDUCATION
Room 2002, School of Education
The University of Michigan
Ann Arbor, Michigan 48109-1259
(313) 764-5522

Form 040087 Rev. 5/11/88

GENERAL INFORMATION

Purpose of PLUSS

The Professional/Liberal Undergraduate Self-Study (PLUSS) helps stimulate discussion within undergraduate professional programs planning to integrate liberal education goals in their students' experiences. PLUSS also provides an organizing framework for professional and liberal studies faculty to identify and mutually resolve issues related to such integration.

PLUSS helps identify common and divergent views and other starting points for discussion. An even wider perspective is gained by collecting the responses of students and recent graduates.

Typically, a decision to use PLUSS as a stimulus to discussion will be made by a particular undergraduate professional program (e.g., nursing, business, architecture). This program will then invite other faculty members concerned with liberal education to join their discussions.

Versions of PLUSS

PLUSS has separate versions for (1) professional program faculty, (2) liberal studies faculty, (3) professional program students, and (4) recent graduates of professional programs. Although parts of each version are in survey form, the responses should be collected informally to stimulate discussion within and between campus groups. The available sections of each version are given in the chart below. Within each version, the sections may be used in any combination.

Sections of PLUSS	*Users of PLUSS*			
	Professional Program Faculty	Liberal Studies Faculty	Professional Program Students	Professional Program Recent Graduates
I. Survey of Important Liberal/Professional Outcomes	•	•	•	•
II. Identifying Existing Educational Activities That Achieve Outcomes	•	•	•	•
III. Adequacy of Program Discussions	•	•		
IV. Collaboration/Integration Matrix and Discussion Guide	•	•		
V. Indicators of Professional/ Liberal Integration	•	•		
VI. Supports and Barriers Discussion Guide	•	•		

Development and field testing of PLUSS was supported by the Fund for the Improvement of Postsecondary Education and The University of Michigan through the Liberal Outcomes of Professional Study Project. Related background information and assistance in using PLUSS may be obtained from the Professional Preparation Project.

Professional Preparation Program • 2002 SEB, The University of Michigan • Ann Arbor, MI 48109-1259

Outcomes Important to Educators in Eight Undergraduate Professional Fields*

PLUSS stimulates discussions about integrating liberal and professional study by posing for consideration a set of potentially important student outcomes.

The particular set of liberal/professional outcomes included in PLUSS was originally derived from literature in professional fields. Next, faculty members in professional programs nationally were surveyed and rated these outcomes as very important for their graduates to achieve. Subsequently, the set was expanded, refined, and field-tested during 1986 by pairs of professional program and liberal arts faculty from several colleges and universities. For easy reference, these outcomes are provided in this insert.

PLUSS is based on two sets of broad student outcomes:

Traditional Professional Competence	Outcomes frequently considered primary goals of professional preparation in college.
Liberal/Professional Education Outcomes	Outcomes encompassing goals of liberal education but phrased in terms especially relevant to graduates who prepare for professional positions.

The two sets of outcomes can be viewed as overlapping realms (see figure below). The liberal/professional outcomes express common goals for students endorsed by both professional and liberal educators. Because most colleges and professional programs may find that some desired outcomes are not covered in this list, PLUSS provides space to add other locally valued outcomes.

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5/11/88

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Outcomes Important to Educators in Eight Undergraduate Professional Fields*

Traditional Professional Outcomes

Conceptual Competence — The graduate understands the theoretical foundations of the profession.

Technical Competence — The graduate can perform skills required of the professional.

Integrative Competence — The graduate can integrate theory and skills in the practice setting.

Career Marketability — The graduate has superior employment opportunities because of acquired training.

Professional Outcomes in Common with Liberal Education

Communication Competence — The graduate can read, write, speak, and listen effectively to acquire, develop, and convey ideas and information.

Reading, writing, speaking, and listening are skills essential to professional practice and to continued professional growth as well as to informed citizenry and continued personal growth.

Critical Thinking — The graduate examines issues rationally, logically, and coherently.

Although critical thinking is a universally desired educational outcome, professionals particularly need a repertoire of thinking strategies that will enable them to acquire, evaluate, and perhaps produce information and knowledge. Since much professional practice is problematical, students need to develop analytical skills to make decisions in both familiar and unfamiliar circumstances.

Contextual Competence — The graduate understands the societal context (environment) in which the profession is practiced.

The capability to adopt multiple perspectives allows the graduate to comprehend the complex interdependence between the profession and society. An enlarged understanding of the world and the ability to make judgments in light of historical, social, economic, scientific, and political realities is demanded of the professional as well as the citizen.

(Continued on next page)

*Architecture, business administration, education, engineering, journalism, nursing, pharmacy, social work

Aesthetic Sensibility

The graduate will have an enhanced aesthetic awareness of the arts and human behavior for both personal enrichment and application in enhancement of the profession.

Sensitivity to relationships among the arts, the natural environment, and human concerns epitomizes aesthetic awareness. Through learning to approach life as an aesthetic experience and by viewing work as an act of aesthetic judgment, professionals can more effectively assess and understand the world and their roles within it.

Professional Identity

The graduate acknowledges and is concerned with improving the knowledge, skills, and values of the profession.

Professional identity both parallels and supplements the liberal education goal of developing a sense of personal identity. The sense of personal worth and self-confidence that develops from experiencing success in professional practice, often including contributing or altruistic relationships with clients, is an effective vehicle for gaining a sense of one's place in the world as an individual and citizen.

Professional Ethics

The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.

Liberally educated individuals are expected to have developed value systems and ethical standards that guide their behavior. Since in every field professionals face choices and responsibility in the process of making decisions with full understanding of their consequences, the study of ethics provides a context for developing professional ethics.

Adaptive Competence

The graduate anticipates, adapts to, and promotes changes important to the profession's societal purpose and the professional's role.

A liberally educated person has an enhanced capacity to adapt and to anticipate changes in society. Since professional practice is not static, adaptability can be fostered by promoting the need to detect and respond to changes and make innovations in professional practice.

Leadership Capacity

The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.

All education carries with it the responsibility of developing leadership capacity. This is particularly true for professional education where the problem-decision-action cycle may have broad environmental, social, and individual ramifications. Not only does leadership imply both functional and status obligations, it requires the intelligent, humane application of knowledge and skills.

(Continued on next page)

Scholarly Concern for Improvement

The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.

The heart of the intellectual process is attention to a spirit of inquiry, critical analysis, or logical thinking. Although many critical analysis skills are developed as theory and practice are integrated, the professional curriculum can be specially designed to foster among graduates an obligation to participate in inquiry, research, and improvement of the profession.

Motivation for Continued Learning

The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.

A truly educated person will wish to continue learning throughout life. In professional education, substantial emphasis can be placed on fostering individual responsibility for continued professional growth.

Important Local Program Outcomes

Different colleges may hold unique outcomes for their graduates. Extra spaces in PLUSS provide an opportunity for you to state six additional outcomes.

Outcome	Definition

(End of Outcome Definitions)

PART I

Survey of Importance of Liberal/Professional Outcomes

Purpose: The surveys included in PLUSS are used to gather information that will stimulate campus discussion about integrating liberal and professional study. The program in which you are a student may also be gathering opinions on these questions from professional program faculty members, liberal studies faculty members, and recent graduates.

From your responses, the program hopes to: (1) determine which outcomes students of professional programs believe are most important for them as they enter their profession; and (2) estimate the extent of emphasis that students believe their professional program currently places on these outcomes.

Directions: For each item listed below, circle the number that indicates the **ideal** amount of emphasis you believe the professional program should place on each outcome. Then circle a second number to indicate the **actual** amount of emphasis you believe the professional program currently places on the outcome.

1. IDEAL: How much emphasis do you, as a current student, believe **ideally** should be placed on each outcome during undergraduate study in your professional field? That is, how important is it that when you accept your first professional position you possess each competence or quality listed below?

2. OUR PROGRAM: How much emphasis do you believe each outcome **actually receives** in your professional program?

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
PROFESSIONAL COMPETENCES								
1. The graduate understands the body of knowledge basic to practice of the profession: the theoretical base or the professional knowledge base.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
2. The graduate can perform the fundamental skills or tasks required in professional practice.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
3. The graduate can integrate theory and practice, that is, select the knowledge and skills applicable to a particular professional work setting or problem.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
4. The graduate not only meets basic standards for entrance into the profession but is a competitive applicant for a beginning position.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
LIBERAL/PROFESSIONAL OUTCOMES								
5. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
6. The graduate understands the societal context (environment) in which the profession is practiced.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
7. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
8. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
9. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
10. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
11. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
12. The graduate examines issues rationally, logically, and coherently.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
13. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
14. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
IMPORTANT LOCAL PROGRAM OUTCOMES								
15. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
16. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
17. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

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		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
18. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
19. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
20. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(End of Part I)

PART II

Identifying Existing Educational Activities That Achieve Outcomes

Purpose: It is useful to identify specific activities that students believe help them to achieve liberal/professional outcomes. This exercise may reveal relatively unknown educational activities. It may also provide a basis for discussion of activities that need clarification.

Directions: For each of the "liberal/professional education outcomes," please describe briefly the educational activities in each category that you believe help you achieve the outcome. Some typical categories of formal and informal educational activities are provided.

LIBERAL/PROFESSIONAL OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
1. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.					
2. The graduate understands the societal context (environment) in which the profession is practiced.					

(Continued on next page)

LIBERAL/PROFESSIONAL OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
3. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.					
4. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.					
5. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.					
6. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.					

7. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.					
8. The graduate examines issues rationally, logically, and coherently.					
9. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.					
10. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.					

(Continue on back for local outcomes)

LOCAL PROGRAM OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
11.					
12.					
13.					
14.					
15.					
16.					

(End of Part II)

Version D
Professional Program
Recent Graduates

PLUSS©

Professional/Liberal Undergraduate Self-Study

A self-study guide for undergraduate programs that are discussing how to integrate liberal education goals with professional students' experiences

ppp
The Professional Preparation Project
The University of Michigan

CENTER FOR THE STUDY OF HIGHER AND POSTSECONDARY EDUCATION
Room 2002, School of Education
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Form 040087 Rev. 5/11/88

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Typically, a decision to use PLUSS as a stimulus to discussion will be made by a particular undergraduate professional program (e.g., nursing, business, architecture). This program will then invite other faculty members concerned with liberal education to join their discussions.

Versions of PLUSS

PLUSS has separate versions for (1) professional program faculty, (2) liberal studies faculty, (3) professional program students, and (4) recent graduates of professional programs. Although parts of each version are in survey form, the responses should be collected informally to stimulate discussion within and between campus groups. The available sections of each version are given in the chart below. Within each version, the sections may be used in any combination.

	Users of PLUSS			
Sections of PLUSS	Professional Program Faculty	Liberal Studies Faculty	Professional Program Students	Professional Program Recent Graduates
I. Survey of Important Liberal/Professional Outcomes	•	•	•	•
II. Identifying Existing Educational Activities That Achieve Outcomes	•	•	•	•
III. Adequacy of Program Discussions	•	•		
IV. Collaboration/Integration Matrix and Discussion Guide	•	•		
V. Indicators of Professional/ Liberal Integration	•	•		
VI. Supports and Barriers Discussion Guide	•	•		

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Professional Preparation Program • 2002 SEB, The University of Michigan • Ann Arbor, MI 48109-1259

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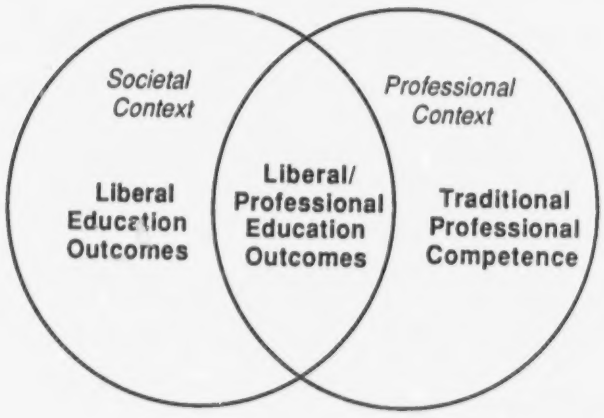

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Professional Outcomes in Common with Liberal Education

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Critical Thinking — The graduate examines issues rationally, logically, and coherently.

Although critical thinking is a universally desired educational outcome, professionals particularly need a repertoire of thinking strategies that will enable them to acquire, evaluate, and perhaps produce information and knowledge. Since much professional practice is problematical, students need to develop analytical skills to make decisions in both familiar and unfamiliar circumstances.

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(Continued on next page)

*Architecture, business administration, education, engineering, journalism, nursing, pharmacy, social work

Aesthetic Sensibility

The graduate will have an enhanced aesthetic awareness of the arts and human behavior for both personal enrichment and application in enhancement of the profession.

Sensitivity to relationships among the arts, the natural environment, and human concerns epitomizes aesthetic awareness. Through learning to approach life as an aesthetic experience and by viewing work as an act of aesthetic judgment, professionals can more effectively assess and understand the world and their roles within it.

Professional Identity

The graduate acknowledges and is concerned with improving the knowledge, skills, and values of the profession.

Professional identity both parallels and supplements the liberal education goal of developing a sense of personal identity. The sense of personal worth and self-confidence that develops from experiencing success in professional practice, often including contributing or altruistic relationships with clients, is an effective vehicle for gaining a sense of one's place in the world as an individual and citizen.

Professional Ethics

The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.

Liberally educated individuals are expected to have developed value systems and ethical standards that guide their behavior. Since in every field professionals face choices and responsibility in the process of making decisions with full understanding of their consequences, the study of ethics provides a context for developing professional ethics.

Adaptive Competence

The graduate anticipates, adapts to, and promotes changes important to the profession's societal purpose and the professional's role.

A liberally educated person has an enhanced capacity to adapt and to anticipate changes in society. Since professional practice is not static, adaptability can be fostered by promoting the need to detect and respond to changes and make innovations in professional practice.

Leadership Capacity

The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.

All education carries with it the responsibility of developing leadership capacity. This is particularly true for professional education where the problem-decision-action cycle may have broad environmental, social, and individual ramifications. Not only does leadership imply both functional and status obligations, it requires the intelligent, humane application of knowledge and skills.

(Continued on next page)

Scholarly Concern for Improvement

The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.

The heart of the intellectual process is attention to a spirit of inquiry, critical analysis, or logical thinking. Although many critical analysis skills are developed as theory and practice are integrated, the professional curriculum can be specially designed to foster among graduates an obligation to participate in inquiry, research, and improvement of the profession.

Motivation for Continued Learning

The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.

A truly educated person will wish to continue learning throughout life. In professional education, substantial emphasis can be placed on fostering individual responsibility for continued professional growth.

Important Local Program Outcomes

Different colleges may hold unique outcomes for their graduates. Extra spaces in PLUSS provide an opportunity for you to state six additional outcomes.

Outcome	Definition

(End of Outcome Definitions)

PART I

Survey of Importance of Liberal/Professional Outcomes

Purpose: The surveys included in PLUSS are used to gather information that will stimulate campus discussion about integrating liberal and professional study. The program of which you are a recent graduate may also be gathering opinions on these questions from professional program faculty members, liberal studies faculty members, and current students.

From your responses, the program hopes to: (1) determine which outcomes recent graduates of professional programs believe are most important for them as they enter their profession; and (2) estimate the extent of emphasis that recent graduates believe their professional program currently places on these outcomes.

Directions: For each item listed below, circle the number that indicates the **ideal** amount of emphasis you believe the professional program should place on each outcome. Then circle a second number to indicate the **actual** amount of emphasis you believe the professional program currently places on the outcome.

1. IDEAL: How much emphasis do you, as a recent graduate, believe **ideally** should be placed on each outcome during undergraduate study in your professional field? That is, how important is it that when you accept your first professional position you possess each competence or quality listed below?

2. OUR PROGRAM: How much emphasis do you believe each outcome **actually receives** in your professional program?

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
PROFESSIONAL COMPETENCES								
1. The graduate understands the body of knowledge basic to practice of the profession: the theoretical base or the professional knowledge base.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
2. The graduate can perform the fundamental skills or tasks required in professional practice.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
3. The graduate can integrate theory and practice, that is, select the knowledge and skills applicable to a particular professional work setting or problem.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
4. The graduate not only meets basic standards for entrance into the profession but is a competitive applicant for a beginning position.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
LIBERAL/PROFESSIONAL OUTCOMES								
5. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
6. The graduate understands the societal context (environment) in which the profession is practiced.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
7. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
8. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
9. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
10. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
11. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
12. The graduate examines issues rationally, logically, and coherently.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
13. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
14. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
IMPORTANT LOCAL PROGRAM OUTCOMES								
15. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
16. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
17. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(Continued on next page)

		EMPHASIS ON OUTCOME No Emphasis						Heavy Emphasis
18. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
19. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7
20. _____	IDEAL:	1	2	3	4	5	6	7
	OUR PROGRAM:	1	2	3	4	5	6	7

(End of Part I)

PART II

Identifying Existing Educational Activities That Achieve Outcomes

Purpose: It is useful to identify specific activities that recent graduates believe helped them to achieve liberal/professional outcomes. This exercise may reveal relatively unknown educational activities. It may also provide a basis for discussion of activities that need clarification.

Directions: For each of the "liberal/professional education outcomes," please describe briefly the educational activities in each category that you believe helped you achieve the outcome. Some typical categories of formal and informal educational activities are provided.

LIBERAL/PROFESSIONAL OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
1. The graduate can read, write, speak, and listen and use these processes effectively to acquire, develop, and convey ideas and information.					
2. The graduate understands the societal context (environment) in which the profession is practiced.					

(Continued on next page)

Professional Preparation Program • 2002 SEB, The University of Michigan • Ann Arbor, MI 48109-1259

5/11/88

LIBERAL/PROFESSIONAL OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
3. The graduate acknowledges and is concerned for improving the knowledge, skills, and values of the profession.					
4. The graduate understands and accepts the ethics of the profession as standards that guide professional behavior.					
5. The graduate anticipates, adapts to, and promotes changes important to the profession's purpose and the professional's role.					
6. The graduate recognizes the need to increase knowledge and advance the profession through systematic, cumulative research on problems of theory and practice.					

7. The graduate continues to explore and expand personal, civic, and professional knowledge and skills throughout a lifetime.					
8. The graduate examines issues rationally, logically, and coherently.					
9. The graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society.					
10. The graduate has enhanced aesthetic awareness of arts and human behavior for both personal enrichment and application in enhancement of the profession.					

(Continue on back for local outcomes)

LOCAL PROGRAM OUTCOMES	Coursework in Professional Program	Coursework Outside of Professional Program	Community or Field Experiences	Practicum, Internship, or Clinical Assignment	Other Activities
		HELPFUL ACTIVITIES			
11.					
12.					
13.					
14.					
15.					
16.					

(End of Part II)

Appendix C

Press releases, ads, and other documents related to release of the report

Announcing...

Wednesday, June 8, 1988, 4-5 pm • Parlor C, 6th Floor • Palmer House Hotel • Chicago • (at the AAHE Assessment Forum)

DISCUSSANTS:

Co-Directors **Joan S. Stark** and **Malcolm A. Lowther**; and Network Panel Members **L. Jackson Newell**, Dean of Liberal Education, University of Utah, and **Dwight Sangrey**, Dean of the School of Engineering, Rensselaer Polytechnic Institute

Strengthening the Ties That Bind

INTEGRATING UNDERGRADUATE LIBERAL AND PROFESSIONAL STUDY

REPORT OF THE PROFESSIONAL PREPARATION NETWORK

UNIVERSITY OF MICHIGAN

JOAN S. STARK AND MALCOLM A. LOWTHER

Since 1986, pairs of professional program and liberal arts faculty from sixteen colleges have shared successful organizational strategies and educational activities that integrate liberal and professional studies. The group was guided by a prominent eleven-member advisory panel representing eight undergraduate professional fields (architecture, business administration, engineering, journalism, nursing, pharmacy, social work, and teacher education), the liberal arts, and accrediting associations.

In this report, the group encourages others to conduct similar discussions. The Professional Preparation Network presents its challenges as a call to action for colleges everywhere.

To guide the lively discussions sure to be prompted by this complex topic, the Network is also presenting **PLUSS©**, the Professional/Liberal Undergraduate Self-Study. PLUSS provides discussion guides for professional program faculty, liberal studies faculty, professional program students, and graduates who wish to examine program goals and procedures. It helps them identify influences affecting the professional program, and it focuses discussion on achieving desired liberal education outcomes in undergraduate professional programs.

For further information: Mary Joscelyn, Public Relations, 2400 School of Education Building, The University of Michigan, Ann Arbor, MI 48109-1259, telephone (313) 936-2741.

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(313) 764-5520
2117 School of Education Building
Ann Arbor, Michigan 48109

NEWS RELEASE

EMBARGOED UNTIL JUNE 8, 1988; 4 PM

CONTACT: Joan S. Stark
or Malcolm A. Lowther
(313) 936-2741

NATIONAL REPORT RECOMMENDS "STRENGTHENING THE TIES THAT BIND" TO INTEGRATE LIBERAL STUDIES INTO UNDERGRADUATE PROFESSIONAL PROGRAMS

Ann Arbor, MI--How can our nation's colleges educate undergraduates for the professions while enriching their education through liberal study?

"First, we recommend that faculty from the professional schools and liberal studies programs sit down and talk about integrating their curricula," say Joan S. Stark and Malcolm A. Lowther, co-directors of a project that sought an answer to this perennial problem.

Under the guidance of a national advisory panel, for two years fifty faculty members from around the country have done just that. Panel members and faculty represented eight undergraduate professional fields (architecture, business administration, engineering, journalism, nursing, pharmacy, social work, and teacher education), the liberal arts, and accrediting associations.

The teams, made up of two members from each institution, one representing a professional program and the other a traditionally liberal arts subject area, have gathered to share organizational strategies and educational activities that integrate liberal and professional studies. They have discussed, argued, and finally agreed on some common goals for professional program graduates. More importantly, they have shared varied ways to achieve these goals and many have even started the process on their own campuses.

Encouraged by the success of their conversations, they now extend a challenge to faculty and administrators everywhere. **"Strengthening the Ties That Bind: Integrating Undergraduate Liberal and Professional Study,"** describes their experience, and challenges others to embark on this

valuable mission. The group expects their report to be provocative and their recommendations hotly debated. "Productive debate is what we want to initiate," said Stark. "The more people on campus who discuss curricular integration, the better."

In a foreword to the report by Frank H. T. Rhodes, president of Cornell University, encourages campus leaders, faculty members, and policy makers to continue the dialog started by this volunteer group. The Professional Preparation Network, says Rhodes, "has called upon us all to create a new sense of community as we seek to infuse professional education with the spirit of liberal arts."

"Too often," say Stark and Lowther, "faculty representing the liberal arts and professions have taken a competitive stance. Through this project, these people have formed productive linkages to understand each other's teaching mission."

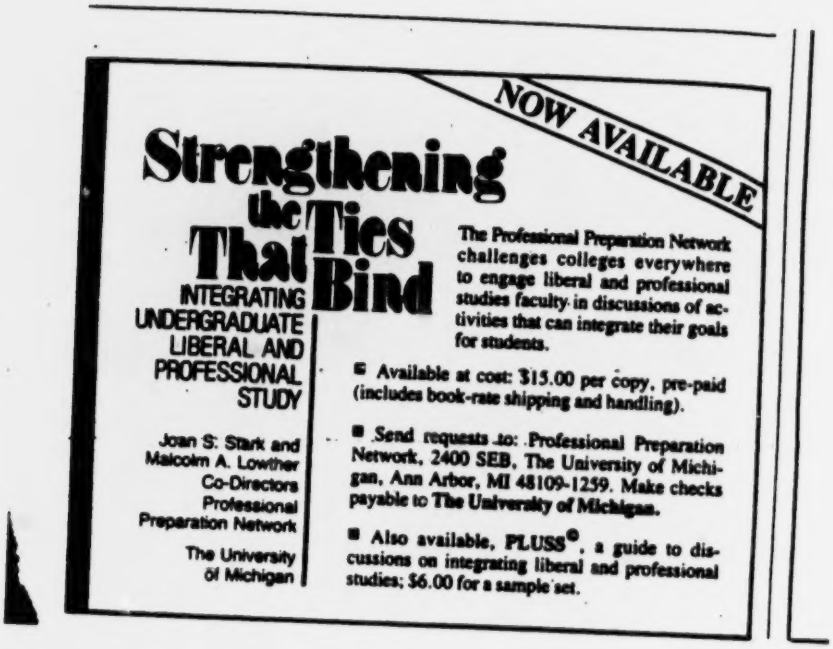
To guide the lively discussions sure to be prompted by this complex topic, the Network is also presenting **PLUSS**, the Professional/Liberal Undergraduate Self-Study. PLUSS provides several specific discussion guides for professional program faculty, liberal studies faculty, professional program students, and graduates who want to examine program goals. It helps them identify influences affecting the professional program, and it focuses the discussion on achieving desired liberal outcomes in undergraduate professional programs.

The Professional Preparation Network has been sponsored by the Fund for the Improvement of Post-Secondary Education and the University of Michigan.

Strengthening the Ties That Bind and review copies of **PLUSS** are available at cost from the Order Department, Professional Preparation Project, 2400 School of Education Building, The University of Michigan, Ann Arbor, MI 48109-1259.

-END-

Advertisement in Chronicle of Higher Education


NOW AVAILABLE
Strengthening the Ties That Bind
INTEGRATING UNDERGRADUATE LIBERAL AND PROFESSIONAL STUDY
Joan S. Stark and Malcolm A. Lowther
Co-Directors
Professional Preparation Network
The University of Michigan
The Professional Preparation Network challenges colleges everywhere to engage liberal and professional studies faculty in discussions of activities that can integrate their goals for students.
■ Available at cost: $15.00 per copy, pre-paid (includes book-rate shipping and handling).
■ Send requests to: Professional Preparation Network, 2400 SEB, The University of Michigan, Ann Arbor, MI 48109-1259. Make checks payable to The University of Michigan.
■ Also available, PLUSS©, a guide to discussions on integrating liberal and professional studies; $6.00 for a sample set.

(Governors, *from page 1*)

- Testing students on what they know, not just what's easy to measure.
- Developing a broader range of indicators to gauge school success or failure.
- Issuing annual report cards to individual schools, using current data on their performance.

For more information on the report, contact: Rae Bond, National Governors' Association, Hall of the States, 444 North Capitol St., Washington, D.C. 20001; (202) 624-5300.

***

(Indicators, *from page 2*)

"By displaying the data over time, you get a sense of where we are and where we're going to be," Smith said. "The function of a publication like this is to inform that discussion."

Note: Copies of the Department's report will be sent to EWA members in mid-September. For more information, call: Tom Lyon, (202) 732-4302.

Education Reporter. Published six times a year by the Education Writers Association, 1001 Connecticut Avenue, N.W., Suite 310, Washington, D.C. 20036. Postage paid at Washington, D.C. Address editorial correspondence to: Education Reporter. Telephone: (202) 429-9680. Publisher: John Rankin; Editors: Lisa Walker and John Rankin; Assistant Editor: Bert Mennings; Typography: Chronicle Type & Design. Copyright © 1988.

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ASSIGNMENT SHEET

New Books/Publications

MegaSkills: How Families Can Help Children Succeed in School and Beyond, by Dorothy Rich. A collection of strategies, activities, and "recipes" for involving parents in their children's education, written by the director of the Washington, D.C.-based Home and School Institute. Available from local bookstores. $8.95 suggested retail.

The Undereducation of American Youth, by Jose A. Cardenas, Maria del Refugio Robledo, and Dorothy Waggoner. Booklet published by the Texas-based Intercultural Development Research Association which analyzes U.S. Census data on undereducation trends among American youth. Contact: IDRA, 5835 Callaghan Road, Suite 350, San Antonio, TX 78228; (512) 684-8180.

Results in Education, 1988. The second follow-up to the Governors' 1986 report, *Time For Results*. Contact: Rae Bond, National Governors' Association, 444 North Capitol Street, N.W., Washington, D.C. 20001; (202) 624-5300.

The Institute for Educational Leadership (IEL) has developed demographic profiles of the following states and their educational systems: AZ, CA CT, DE, FL, IN, KY, MI, NY, OH, and TX. Reporters may receive one free copy of the report on their state by contacting the EWA office. Additional copies of state reports are available from IEL for $7.00 each. To receive additional copies, please write: Publications Department, Institute for Educational Leadership, 1001 Connecticut Avenue, N.W., Suite 310, Washington, D.C. 20036.

Up Your Score: The Underground Guide to Psyching Out the Scholastic Aptitude Test. SAT review book written by three humorous high school students, each of whom scored over 1500 on the test and got into the college of his choice. Available from local bookstores. $9.95 suggested retail.

Challenges for School Leaders, by Kristen J. Amundson. A compilation of recommendations for improving school leadership, published by the American Association of School Administrators. Contact: American Association of School Administrators, 1801 North Moore Street, Arlington, VA 22209; (703) 528-0700.

Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study, by Joan S. Stark and Malcolm A. Lowther. The findings and recommendations of a two-year study of ways to link undergraduate and professional education. Contact: Center for the Study of Higher and Postsecondary Education, University of Michigan, School of Education, Room 2117, Ann Arbor, MI 58109; (313) 936-2741.

Important Dates

October 9-14, 1988 – St. Petersburg, Fl.

Seminar on education writing, sponsored by the Poynter Institute for Media Studies. Seminar will focus on all levels of education writing. Contact: Poynter Institute for Media Studies, 801 Third Street South, St. Petersburg, FL 33701; (813) 821-9494.

October 10, 1988 – New York City

Seventh Annual Conference, Reading Reform Foundation, New York Metropolitan Area Chapter. "Effective Techniques for Teaching Reading, Writing and Spelling." Contact: Leona or Phillip Spector, Reading Reform Foundation, 333 West 57th Street, New York, NY 10019; (212) 307-7320.

October 13-14 – Quincy, Ill.

Annual 'Quincy Conference' sponsored by Quincy Public Schools. Contact: Quincy Conference, 1444 Maine Street, Quincy, IL 62301; (217) 224-6770.

October 13-15 – Louisville, Ky.

Annual international conference of the Council for Learning Disabilities. Contact: Kirsten McBride, Executive Secretary, CLD, P.O. Box 40303, Overland Park, KS 66204; (913) 492-3840.

October 27-28 – New York City

Annual conference of the Educational Records Bureau. "Looking into the 1990's." Contact: Educational Records Bureau, 37 Cameron Street, Wellesley, MA 02181; (617) 235-8920.

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(313) 764-5520
2117 School of Education Building
Ann Arbor, Michigan 48109

May 31, 1988

Dear Colleague:

We are pleased to send you an advance copy of Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study. This report will be released officially on June 8 in Chicago at the American Association for Higher Education's National Conference on Assessment.

The document summarizes a productive dialogue among educators teaching in liberal arts and in eight undergraduate professional fields at four-year colleges and universities. Over a two-year period, the fifty-member group explored common goals of liberal and professional study that offer opportunities for expanded and improved curricular integration. We now challenge academic leaders to initiate similar discussions on their campuses.

We hope you find Strengthening the Ties that Bind provocative and useful. Support for this project came from the Fund for the Improvement of Postsecondary Education, the University of Michigan's Center for the Study of Higher and Postsecondary Education, and the participating institutions; it has enabled us to share our experiences in this report. Additional copies may be obtained at cost from the Professional Preparation Project, Attention: Mary Joscelyn, Public Relations, 2400 School of Education, The University of Michigan, Ann Arbor, MI 48109-1259.

Sincerely,

Joan S. Stark

Joan S. Stark
Project Co-Director

Malcolm A. Lowther

Malcolm A. Lowther
Project Co-Director

JSS/MAL/jck

Enclosure

SCHOOL OF EDUCATION The University of Michigan
CENTER FOR THE STUDY OF HIGHER
AND POSTSECONDARY EDUCATION
(313) 764-5520
2117 School of Education Building
Ann Arbor, Michigan 48109

June 21, 1988

Dear Colleague:

We are pleased to send you a copy of Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study. This report was officially released on June 8 in Chicago at the American Association for Higher Education's National Conference on Assessment.

The document summarizes a productive dialogue among educators teaching in liberal arts and in eight undergraduate professional fields at four-year colleges and universities. Over a two-year period, the fifty-member group explored common goals of liberal and professional study that offer opportunities for expanded and improved curricular integration. We now challenge academic leaders to initiate similar discussions on their campuses.

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Sincerely,

Joan S. Stark

Joan S. Stark
Project Co-Director

Malcolm A. Lowther

Malcolm A. Lowther
Project Co-Director

JSS/MAL/jck

Enclosure

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2117 School of Education Building
Ann Arbor, Michigan 48109

To: Professional Preparation Network Members and Advisory Panel

From: Joan Stark and Mal Lowther

Date: September 1, 1988

This is to bring you up-to-date with the latest PPP news as the new academic year begins.

As planned, we released Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study in Chicago on June 8, 1988 at the American Association for Higher Education conference on assessment. L. Jackson Newell and Steve Aigner, Advisory Board members, and Thomas Carroll, FIPSE Deputy Director, accompanied us in presenting the report. An advance copy was supplied to Scott Heller of The Chronicle of Higher Education who produced an informative story on the day of the official release.

Strengthening the Ties That Bind is in far more demand than we could have imagined. Although it's not quite as popular as recent prescriptions for change in higher education by Bloom or Hirsch, some colleges are ordering 100 copies at a time. The first printing was 5000 copies; about half were distributed free and the other half sold at cost. A new printing of 3000 has been ordered.

We've received many complimentary letters and a large number of speaking requests, particularly for fall faculty meetings and accrediting association meetings. At the request of both groups, we plan to conduct workshops at both the Association of American Colleges (January) and the American Association for Higher Education meeting (March) to illustrate how discussion of mutually valued outcomes could get started (using PLUSS or other means). Other than that, Mal and I are declining most requests that we speak at individual campuses. For one thing, we feel that faculty are more likely to engage in fruitful discussion of the idea of integration without outsiders seeming to preach at them. For another thing, we simply don't have enough time to travel widely even though most offer travel funds and an honorarium of $300 to $500. A few of you have been willing to take on an occasional speaking engagement. If others are willing to do so, let us know so we can mention your name as a knowledgeable person to callers. We've already taken the liberty of recommending some of you.

As you know, we mentioned the potential availability of

case studies in "Strengthening the Ties..." Although we received only a few drafts from network members, we thought we would test the interest before putting a lot of energy into another publication. Our sense, at this point, is that there is not much demand for case studies. We think it might be better to draw from our work illustrations of principles that emerge in a broader story of the network's effort without identifying specific colleges. On the other hand, several of you have called to say that publicity given to the work of the network gave the effort on your campus quite a boost. Some of you may make more progress this fall than over the past two years. So although the FIPSE grant has ended, we will expect to call each of you to find out about any new developments growing from the project on your local scene before making a final decision about case studies.

We have not heard anything recently about the reunion that some members of the group were exploring in conjunction with the AGLS meeting in Wilkes-Barre on October 13-15. We're sure any of you who wanted to attend that meeting would be welcome. Contact Robert Heaman at Wilkes College for details.

With the end of the FIPSE grant, we will be incorporating some of the work on liberal and professional education within our work with NCRIPTAL. We are enclosing the latest newsletter and publications list (a new brochure is forthcoming) from NCRIPTAL to help you keep up-to-date with our activities.

JSS/MAL/jck

Enclosures: 2

"Connecting Across the Campus"

Address at Fall Faculty Days
Luther College
August 26, 1988

James P. Winship, Director
Teaching Enhancement Center
University of Wisconsin-Whitewater

It's the fall of '88, and there are lots of people standing up in lots of places giving speeches. Most of these people are running for office. Some of the talks are designed to give as pleasant an impression as possible while saying nothing specific that could lead to disagreement. Others are crafted to feature up to 45 seconds of catchy phrases, ideal for a "sound bite" on the local or national news. And here I stand (that phrase has a familiar ring), neither running for office nor away from anything more substantial than late registration signup duties on my own campus, with the better part of 45 minutes to talk with you about reasons for making what we do in higher education more coherent.

It may be the grandiosity of the political season, as I am attempting something ambitious here. I want to lay out before you two concerns I have, about how well we are preparing students for work and life in the 21st century and about how poorly students and other people in this society make connections between one aspect of their life and others. After speculating on why higher education doesn't do a better job on the preparation for the future and on helping students in connecting their learning, I'll offer a "package deal", a way to address both issues with a single process. Maybe that is the influence of the political season, in that the problem and solutions neatly fit together.

Let me start with education for the present leading to the future, for a new century, for literally a new millennium. What futurists, business leaders, and some higher education reports are telling us is that the skills that were sufficient for professionals, managers, and educators in the recent past no longer suffice.

We hear from the business community that a changed and changing world economy needs workers with skills and characteristics different than those of the past. Tom Peters, co-author of <u>In Search of Excellence</u>, now states that there are no excellent companies, that too much is changing in the world too quickly for any company to maintain a substantial lead over competitors for very long.

Needed are managers who emphasize responsiveness and quality and a workforce that is constantly training and retraining itself to upgrade skills and adapt to new realities. Peters and the dean of the management gurus Peter Drucker both claim that the traditional hierarchical pyramid shape of business organizations is changing to a "flatter" organizational structure with fewer levels and more decisions being passed down to the workers.[1] Communication skills and flexibility become even more desirable under these circumstances.

Roger Smith, the president of General Motors, states that in times of rapidly changing conditions, it is crucial to have "the ability to perceive the relations between thoughts or things, or forms of expression that may seem utterly different, and to be able to combine them into some new forms-- the power to connect the seemingly unconnected."[2] Smith also sees as important the habits of "sideways thinking" and the cross-classifying habit of mind that can come from looking many different ways at an issue or a work of art or literature while in college.

John Sculley, the president of Apple Corporation, contends that to be successful in later life, students need to in their college years develop skills to sort out what is important in a piece or pieces of information, to develop their ability to work collaboratively and in teams, and to develop their written and oral communication skills.[3]

A report commissioned by the accrediting body for schools of business and management released last spring called for business schools and corporations to rethink and redo their programs and practices in several key areas. To meet the challenges of "the change and complexity we can expect in the future".[4] Six "undernourished" areas in business schools' curricula were identified as 1) narrowness or the lack of breadth in students' programs of study, 2) lack of an emphasis on the outside influences that affect work organizations, 3) need to "globalize" the curriculum, 4) need to emphasize changes to an information/service economy, 5) lack of an emphasis on "people skills, and 6) need for cross-functional integration, the synthesis and integration of specialized functional areas of the corporation.

It is not only in business and industry that changing conditions require transformed skills and abilities. The Carnegie Forum on Education and the Economy released a report in 1986, A Nation Prepared: Teachers for the 21st Century. In order for teachers in our public schools to prepare their students for a knowledge-based economy, the report states that we need teachers who:

> "should have a good grasp of the ways in which all kinds of physical and social systems work; a feeling what data are and the uses to which they can be put, an ability to help students see patterns of meaning where others see only confusion; an ability to foster genuine creativity in students; and the ability to work with other people in work groups that decide for themselves how to get the job done. They must be able to learn all the time, as the knowledge required to do their work twists and turns with new challenges and the progress of science and technology. Teachers will not come to the school knowing all they have to know, but knowing how to figure out what they need to know, where to get it, and how to help others make meaning out of it."[5]

In my field, social workers are confronted with the reality that conditions change far more rapidly than the programs that serve people in need. AIDS, homelessness, and child sexual abuse are examples of real and pervasive social problems for which society has not developed or funded adequate responses. I tell my students that as we learn (I hope) to help individuals and communities deal with these problems, a new set of problems or diseases is emerging somewhere.

One problem, then, is the need for future professionals and other workers to acquire the skills, information, and attitudes that will serve them and society well in coming years. The second problem is harder for me articulate. I perceive a fragmentation in many people's lives in this country today, where people see little connection between what they do in one part of their life and in another, nor is this related to what is going on in the larger society. The context in which they play out their lives is often unexamined.

Robert Bellah and his co-authors in Habits of the Heart: Individualism and Commitment in American Life describe a split in the values that they we use in different parts of our lives. We tend to be utilitarian in our economic and occupational spheres of living, less so in our personal and family lives.

We also tend to not think much about the larger societal context in which we live and work. After looking at business managers and family therapists, the authors state that "The manager and the therapist take the functional organization of industrial society for granted, as the unproblematical context of life. The therapist, like the manager, takes the ends as they are given; the focus is upon the effectiveness of the means."[6]

Aspects or facets of people's lives do not connect with each other. The community leader participates in insider trading on Wall Street; the social helps family members affirm each other as equals and also treats secretaries like second-class citizens. We drive our cars a lot and buy fast food in styrofoam containers, as if those actions had no potential connection with warming trends and ozone layer destruction. We separate our lives into separate states, East and West Germanies divided by walls.

Do students do any better than the rest of us? There is a tendency for students to view their college work as a collection of largely unconnected courses with credit hours attached as a way of keeping score. Courses to meet distribution requirements should be "gotten out of the way" as expeditiously as possible, so that the student can get into the coursework in the major. With the exception of some math and science courses and sequences in the major, what one learns in one course has little to do with what one learns in another. When one accumulates enough credit hours and grade points, one graduates. Final undergraduate projects, and this may be the case with the Senior Research Paper here, encourage students to specialize rather than pull together their college learning.

Connections from the classroom to other parts of student life are also frequently not made. Alexander Astin, who has written extensively on higher education and student development, notes that what students learn about people in organizations and leadership in their courses is rarely applied when they are in leadership positions in student activities, and students often do not bring back to their roles as students what they have learned in non-classroom ways.[7]

Jon Wagner tells a story which occurred in an upper-division seminar on the international economy at the University of California-Berkeley. Three students were:

> "giving a report on labor management issues in underdeveloped countries. The student presenters were articulate, they knew the course readings cold, and they had prepared for the instructor and their fifteen fellow students an impressive list of related questions and recommended readings.
>
> The discussion following the presentation focused on one central question: 'How is it that workers in undeveloped countries appear so unconcerned about workplace hazards, particularly those associated with chemical industries, asbestos mining, and so on?' In discussing this question with great interest and intensity, students made numerous astute references to concepts and historical details gleaned from course readings, lectures, and other presentations.
>
> The seminar itself met in a basement classroom in one of the older buildings on campus, one in which exposed pipes of varying diameters ran beneath the ceiling. On some of these pipes could be seen insulation that looked a lot like asbestos.. A visitor to the class called this to the students' attention, asking how it was that they could appear so unconcerned about a hazard in their own workplace.
>
> In response, the students began identifying a wide range of other workplace hazards that they encountered directly or supported through their own consumer choices. Confessing that they tried not to think too much about these things, the students also described some elaborate and imaginative rationalizations for segregating the daily business of their lives from concerns about health and morality. And they did all this with great candor, intelligence, and wit.
>
> However, after fifteen minutes or so of this discussion, the students fell strangely silent, apparently lost in thought. Then one of the student presenters remarked, 'Well, I guess we really got off the the subject there for a while.'
>
> At that the other students chuckled, murmured in agreement, and leaned forward in their seats to get 'back on track' with their topic for the day. During the remainder of the period, they discussed workplace hazards in underdeveloped countries in terms of the assigned readings and as a subject to which their own personal experience-- and their preceding remarks-- bore no relationship whatsoever."[8]

Contrasted with these disjunctions and disconnectedness is a state partially described by word "integrity" and partially by the word "integrated", as in "a well-integrated personality" Both words come from the Latin integer, meaning whole or complete. In different ways, to have integrity and to be well-integrated are both characteristics of individuals whose lives display coherence.

I have identified two areas of concern, the need for students to acquire needed skills and attributes for 21st century life and work and the difficulty that many students have in not compartmentalizing their lives. There are a variety of reasons, I think, as to why colleges and universities are not attending more to future-related skills and why they don't make greater efforts to help students transcend the separations between school and other parts of their lives.

The ways in which higher education faculty members are educated and professionally socialized have something to do with our actions and inactions. In graduate school, we form an identity with a discipline or profession, and we tend to see ourselves as historians or accountants rather than educators.

Higher education often places a higher value on scholarly development than student development. Promotion, tenure, and merit raises are more often strongly associated with faculty members' recognition from academics in their own field nationally for their individual research and publications than it is a recognition of what the faculty members are doing in their classrooms and on campuses. As Alexander Astin remarks, we generally do not reward "good colleagueship", participating effectively on committees, consulting with other faculty members, operating on an institution-wide perspective.

We're also not sure of the purposes of our efforts. One of the missions of higher education is to provide for students a liberal arts education. According to Maud Chaplin, the historic purpose of a liberal education was to instill in free persons (originally men) the core values of the society, to ensure "that they understood and respected ancient truths and carried on worthy traditions".[10]

Another aim of a liberal education stands in opposition to this. It is liberal in the sense of the Latin "liberare", to liberate, and it seeks to free the student from the unexamined life and to expand the worldview of the student. Along the lines of this distinction people are choosing up sides . E.D. Hirsch, Jr., author of Cultural Literacy: What Every American Ought to Know is the most visible proponent of the first position, that a top priority of educational institutions is to give a shared reality to its students. Others, including the Association of College Teachers of English, disagree. In overly simplistic terms, is our goal as educators to produce a "nation of knowers" or a "nation of learners"?

I haven't meant to imply, by my preceding remarks, that colleges and universities have been unresponsive to the changes in society and the development of students. Even a cursory look at higher educational institutions in the past would demonstrate the ways that postsecondary institutions have changed. Derek Bok, the president of Harvard University, contrasts the instruction and student evaluation common at the turn of the century with those today:

> "At the turn of the century, one could find educators who proclaimed the virtues of mental discipline, others who emphasized practical skills, still others who spoke of transmitting knowledge acquired through scholarship and scientific investigation. Under each of these alternatives, however, the emphasis was clearly on conveying a large body of factual information together with a stock of accepted ideas and principles. Students could rely primarily on their powers of memory to succeed in college, and they were seldom challenged by the clash of conflicting values or confronted with problems for which there was admittedly no convincing solution".[11]

At Harvard and elsewhere, exams have also changed. When Bok looked at exams given in the early part of the century, more than 90 percent of the questions asked students only to repeat fixed sequences of events, facts, or the opinions of others. As the century has progressed, an increasing percentage of the questions ask students to analyze, compare, and discuss complex problems from more than one perspective.[12]

Now, what you may have noticed is that I've been talking for more than fifteen minutes without mentioning the integration of liberal and professional studies, the supposed reason for my being here with you today.

It's not that I brought the wrong talk with me when I drove over from Wisconsin yesterday, it's that I don't see the integration of liberal and professional learning as a valuable end in itself. In the process of working to link professional and liberal education, however, I do see viable ways to both meet the challenges of educating our students for the 21st century and helping them get better in making connections in their lives.

As a professional educator, concerned with the a broadly educated professsional, I think that it is useful to employ the the outcomes outlined in the report, Strengthening the Ties That Bind: Integrating Undergraduate Liberal and Professional Study. Released two months ago, it is a product of the Professional Preparation Network, a group of fifty undergraduate professional and liberal arts faculty members and reprentatives from accrediting agencies, of which I was a member. We began work in the fall of 1986, with support from the Fund for the Improvement of Postsecondary Education. We started with the results of a survey from over 2000 educators in ten professional fields. Joan Stark and Malcolm Lowther, who directed the Professional Preparation Project, had designed the survey based on a literature review of professional and liberal arts education. From that survey, Stark and Lowther had identified seven outcomes considered important by professional educators that were ones traditionally associated with liberal education.

The Professional Preparation Network held three two-day meetings over an eighteen month period, with task groups working between meetings. Our goals were to examine the outcomes and accept, reject, or refine them, and to see how we could apply both this categorization and some tools developed by the project to our own campuses and professional fields.

The first meeting waa a microcosm of the difficulties that liberal arts educators and professional educators have in communicating and working with each other. There is a pecking order, status and prestige, among the disciplines, which along with the differences in language among the various educators produced friction. The problems in agreeing upon the broader purposes of education were very present on the small scale.

We did get over initial distrust and confusion, and decided (or at least most of us did) that a key difference between liberal arts and professional faculty members was that of perspective. An educational outcome, like critical thinking or motivation for continued learning, would be taught by a liberal arts faculty member as it relates to personal development or broad social issues; the professional faculty member would relate it to a problem within a professional context.[13]

We also discussed the utility of the outcomes in common with liberal education. We ended up deciding to add three to the original list, adding critical thinking, aesthetic sensibility, and leadership capacity. The list of outcomes in common with liberal education now reads:

Communication Competence
Critical Thinking
Contextual Competence
Aesthetic Sensibility
Professional Identity
Professional Ethics
Adaptive Competence
Leadership Capacity
Scholarly Concern for Improvement
Motivation for Continued Learning

I believe that the idea and the process of focusing on outcomes constitute powerful means for helping colleges and universities address the future preparation needs and the issue of students not connecting from the classroom. Looking at outcomes, or student abilities, or competencies, helps us to reframe the purpose of higher education. It forces us to ask questions radically different than "Which combination of courses whose semester credit hours add up to 128 should students take?"

I want to briefly look at some of the outcomes identified by the Professional Preparation Network and indicate ways in which they address the issues about preparation for the future presented earlier. These can be considered major by major, or across a campus.

One of these is Contextual Competence, defined as "The graduate has an understanding of the societal context or environment in which the profession is practiced". This is the issue raised by Bellah and his colleagues in Habits of the Heart. An emphasis on providing the context for practice through required courses outside the department, interdisciplinary courses, and good advising could address the issues raised in a recent report on engineering and liberal arts education; based on surveys and examination of over 2000 graduates' transcripts, the report revealed a lack of coherence in the liberal arts courses and an inattention to contextual issues.[14]

The outcome Leadership Capacity was defined as "the graduate exhibits the capacity to contribute as a productive member of the profession and to assume leadership roles as appropriate in the profession and society". Focusing on this outcome forces us to look at the connections between what students are learning in the classroom and in their roles in student activities and in the community, at the connections between the curricular and the co-curricular aspects of student life. This goes beyond involvement; it speaks to the need for student involvement to inform classroom learning, and vice versa.

The outcome Motivation for Continued Learning was defined as "The graduate continues to explore and expand personal, civic and professional knowledge or skills throughout a lifetime". It is estimated that our students will be changing careers three-six times, on the average, between the time they graduate and the time they retire, and the majority of the specific information they will use in the workplace during their careers hasn't been produced yet.

This is an outcome that transcends the difference between liberal and professional learning. The reasons for focusing on this are utilitarian, job-related, and broader. I want to read from the report A New Vitality in General Education:

> Thus we believe that the chief task of the college years is for students not only to gain the ability to identify perspectives, weigh evidence, and make wise decisions, but also how to think about thinking and to enjoy thinking. Students who have done so have crossed the great divide between merely gaining knowledge in order to return it on examinations and using knowledge by making it their own".[15]

It appears, from some preliminary research at Alverno College, that focusing on self-sustained learning during the college years may be the best way to facilitate the growth of lifelong learning. Curricular elements such as practice, modeling, feedback, peer learning, the opportunity to assess one's own abilities, opportunities to connect one's abilities with their application, and the opportunities to apply and integrate abilities in internships help students develop active, independent learning habits.[16]

I could give other examples of the ways that a focus on student ability makes us rethink curriculum and pedagogy. But I want to propose that we also consider the ability to make connections, in all its forms, as a skill that can be developed. This includes connections within a major field, between liberal and professional learning, between the curricular and the co-curricular, and between the reality of academia and the other realities of life.

The proponents of "Writing Across the Curriculum" state that writing is best learned when it is taught in more than composition or English classes, and I believe that the same is true of making connections. At Alverno College, which has a national reputation for the coherence of its ability-based program, faculty members report that it often takes three semesters for students to "catch on" to the emphasis on outcomes, application and connections in their classes. As the recent report A New Vitality in General Education stated, in reference to connecting among general education courses, "Emphasizing... abilities throughout the undergraduate experience makes use of the psychological phenomenon of reinforcement. Reinforcement is crucial in education; people learn through repetition and encouragement as well as inspiration and enlightenment."[17]

If it is important, and desirable, to focus on abilities and skills, how does one do it? I want to venture that to "do it right" demands a multifaceted approach. This includes attention to the organizational mission and leadership, to the accountability and reward systems for faculty, to faculty development opportunities, to the curricular structure and the way "learning paths" are structured for students, to the attitudes of students, to a process that allows for disagreement and decision-making, and to assessment.

Let me start with mission and leadership. The questions can be raised: "Are the developments of specific abilities central to what we do with students as they proceed from matriculation to graduation?" and "Do faculty perceive investing time and energy toward developing student abilities as an important aspect of their worklife, important enough to crowd out other activities?". Without going into detail on organizational change, I think the higher education organizational literature indicates that colleges and universities change most often when the change is incorporated into the mission and there is strong leadership from the top as well as faculty support.

I think that a true emphasis on developing student abilities will occur when there is accountability for the faculty member, there is a reward system that supports changed behaviors, and there are supports for developing new ways of promoting student learning. Without some system of accountability, curricular recommendations become only suggestions, which are unevenly implemented. Documentation from course syllabi and participation on task forces working on connecting across disciplines are two examples of acountability mechanisms that could be implemented.

The important material rewards for faculty (promotion, tenure, pay raises) can reward the faculty member who invests a block of time in retooling a course so that, for example, it fosters the students' adaptive competence or sense of professional ethics. If this kind of activity is not generally received as well as if the faculty member chose to spend the time writing an article for publication, many faculty members will not spend large amounts of time on curricular and institutional change.

Another important aspect is faculty development. For professional educators, a focus on liberal outcomes asks us to go beyond what we have done and learned in the past. For educators in any field, there will be new learning. Allocating monies for attending workshops/conferences or for summer study projects for faculty members provides the means for faculty members to learn how to "put new wine in new bottles", as does release time during the academic year. Brooklyn College, which instituted a new "core curriculum" several years ago, also has begun a "core process", a series of faculty development seminars, sample presentations to all faculty of material in the core courses, faculty writing workshops, etc. In the Professional Preparation Network, we developed microparticipation workshops, in which we as faculty members demonstrated with our peers as students a classroom activity or assignment that contributed to learning in one of the outcomes.

I think that we also need to pay attention to the ways in which patterns of courses are organized for students and by students. In his comprehensive book College: The Undergraduate Experience in America, Ernest Boyer decries the common practice of professional program students taking their liberal arts courses in the first two years and their professional courses in the last two years. According to Boyer, and I agree, this leads to fewer opportunities for connecting liberal and professional learning than if the students were taking both professional and liberal arts courses at the same time during all four years, following parallel tracks.18

I believe that we can structure opportunites for students so that they are more likely to connect from one course to another. PAIDEIA I and II seem to be organized in a way that would lead to this. Another approach that has been used is that of "paired courses", where a student would take two separate courses, taught independently by faculty members in different departments, such as education and psychology. The faculty members in the two courses would be familiar with the material, syllabi, and requirements of the other course, and would help the students enrolled in both courses make connections between the courses.

Another less structured approach is to encourage students to take courses during the same semester with a common theme or time period, for example the History course on "The United States since 1877" and the English course, "American Literature, 1860 to the Present". Colorado College and Davidson College have replaced minors with interdepartmental theme concentrations, where students take five courses from a variety of departments linked by a common theme such as "Asian Studies".

Within programs and courses, we can require that our students integrate from other fields. Russell Sage College has a requirement in its nursing program that seniors solve simulated problems explicitly drawing on what they have learned in their liberal arts and professional courses. We can provide more field experiences and internships, and structure those so that integration and application of learning is an integral part of the experience.

I also think that we need to market to students the importance of broadly educating themselves, for their professional and personal future lives. I am not familiar with the students on this campus. At the University of Wisconsin-Whitewater, where I teach, many students view the purpose of education as leading to the first job; their perspective does not extend beyond the first day on that first job. A conscious effort, including the utilization of successful business managers and other professionals extolling the need for nonspecialized education, is critical to getting students to want to become truly educated.

Most importantly, what is needed on campuses is the opportunity for faculty members, administrators, and students to struggle with and decide what is important and how it is to be achieved, and how they want to make education more coherent. To do that, there is the necessity, campus by campus, of reinventing the wheel. As Derek Bok states in Higher Learning, the process of working toward commonalities, which is usually fractious and time-consuming, can produce both coherence and renewed energy that otherwise would not be there.[17] It leads to the situation, like they say back home, where "everybody is singing from the same hymnbook".

Nannerl Keohane, the eloquent president of Wellesley College, writes about the frustrations of structuring a liberal arts curriculum for today's world. I want to read her words, which I think are also appropriate for what we are discussing here:

> "In debating such questions, it is easy to become frustrated and throw up our hands. It seems impossible to reach any conclusion, even within a close working group of faculty members dedicated to a common goal, much less within our academic community as a whole.

> We may be able to agree that everyone should have read at least one Shakespeare play, but we are unlikely to agree on which.
>
> I would argue, however, that such a process is itself a crucial part of what makes liberal learning work. Refining what we hold to be important, understanding each other's values, reaffirming that there are things worth knowing and that there are more things worth knowing than any of us could possibly ever know-- this process is healthy for all of us; indeed, it is fundamental to our very enterprise.[20]

Students who take part in such discussions during their undergraduate years are more likely to accept with the disagreements about goals and means that mark any complex enterprise; to assume that people will indeed have different values, interests, and ways of doing things; to know what it means to take a stand and work effectively for a purpose held to be important.

One useful tool for faculty members in these discussions is the PLUSS (Professional/Liberal Undergraduate Self-Study) instrument, developed through the Professional Preparation Project. Versions of this survey can be given to professional faculty members, liberal arts faculty members, and students. Results from this can indicate areas of common concern. It has been said that it is easier to move a graveyard than change a curriculum, so common interests may be good starting points.

The final piece of the puzzle is assessment. If we are to endeavor to help our students to develop abilities, to connect from one aspect of their lives to another, we need to devote energy in our classes and programs and institution-wide to seeing how well we are doing, and then applying the knowledge gained in assessment to our ongoing course development and teaching. Classroom research, as espoused by K. Patricia Cross and Tom Angelo, offers some exciting approaches for use in our classes[21]. I have mentioned Alverno College several times; I am impressed with what they do, and impressed that they spend 2% of their annual budget on evaluation, assessment, and institutional research.

Joan Stark and Mal Lowther in Michigan started looking at the links between professional and liberal education and initiated the Professional Preparation Network hoping for a truce between liberal and professional education. It evolved into an effort to integrate liberal and professional education. In my opinion, (and I am borrowing here from Peter Marsh of Syracuse University), the term "integration" is still too bland.

What is needed is a reconfiguration of liberal and professional education, a new idea of the ways that both courses and fields of knowledge support and complement each other. Through trial and error, we can discover the approaches that educate students for living in the future; we can do more to help students become well-integrated persons with a sense of integrity.

I started with a political allusion; I'll close with a political quote. Robert Kennedy once said that "The future does not belong to those who are content with today, timid and fearful in the face of new ideas and bold projects". I believe that the future of higher education lies in our ability to transcend our academic identifications and current practices so that we can boldly educate changing students for a changing world.

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Criteria adopted

AUPHA UNDERGRADUATE MEMBERSHIP CRITERIA

DRAFT: JUNE 11, 1988

I. PREFACE

Undergraduate Programs in the Association of University Programs in Health Administration [AUPHA] are engaged in the education of students at the baccalaureate level for careers in health services management. While students may come from a variety of backgrounds and disciplines, with or without experience, the purpose of baccalaureate education in health services management is to provide the initial education for professional careers in health services management.

Full Member Undergraduate Programs are those programs which have been approved by the AUPHA Panel Review process as meeting the following criteria. Undergraduate programs attempting to meet these criteria may join AUPHA as Associate Member programs for a period not to exceed three years. Associate Members must apply and be approved for Full Membership within a three year period. Full and Associate Members must be located in the United States or Canada. Programs located in other countries are encouraged to join AUPHA as affiliate or other category of membership.

The following criteria serve as requirements of a high quality baccalaureate program in health services management. It is the responsibility of the program to demonstrate how it meets the intent of the criteria. The criteria reflect multiple ways of obtaining similar goals and that flexibility and innovation are essential in the design of curricula. The criteria are applied as the basis for Full Membership. They also serve as a means by which programs can engage in self-assessment.

II. ELIGIBILITY

The Program must present evidence of eligibility which includes the following elements:

A. A health management baccalaureate program located in the United States shall be eligible for Full or Associate Membership if it is part of a college or university accredited by a regional agency recognized by the Council on Postsecondary Accreditation. A program in Canada must be part of a college or university which is a member of the Association of Universities and Colleges of Canada.

B. A Program must be officially approved by the governing body of its college/university and be listed in the college catalog as a course of study leading to a baccalaureate degree.

C. A program must have graduated its first class of students.

D. A Program must be an Associate Undergraduate Program prior to applying for advancement to Full Membership.

[COMMENT: Participation in AUPHA meetings, faculty institutes, conferences, and use of the AUPHA resource center are encouraged before a program applies for Full Membership. This helps the program gain an understanding of the criteria as well as AUPHA gain an understanding of the applicant's program.]

III. CRITERIA FOR FULL UNDERGRADUATE MEMBERSHIP

A. Program Structure

The program must demonstrate that the mission, goals, and objectives of the program and the curriculum are appropriate given the needs of the health care system and the educational mission of both the program and the college/university.

1. Program Objectives

[a] The Program must have a statement of its mission, goals, and objectives which reflects the rationale for the program, the curriculum's conceptual framework, and the program's expected outcomes.

[COMMENT: Where graduate and undergraduate programs exist in the same unit, the undergraduate program must have its own statement.]

[b] The Program's statement of mission, goals and objectives must also address faculty teaching, research, and service.

[c] The Program must have a program director whose authority and responsibility are clearly defined.

[d] The Program must not discriminate based upon race, ethnic origin, creed, or gender in any of its activities.

[COMMENT: A program must be in full compliance with relevant laws as well as University policies regarding affirmative action and equal opportunity. This does not prevent an institution from having a religious affiliation or adopting policies directly related to such affiliation provided adequate notice of such policies is given to all applicants, students, faculty, and employees.]

2. Faculty

A program must have an adequate number of academically qualified faculty to meet the Program's stated mission, goals, and objectives.

[COMMENT: Teaching loads and student faculty ratios must be consistent with the program's mission, goals, and objectives as well as the college/university's standards for promotion and tenure.]

[a] There shall be a minimum of two full-time faculty members whose primary appointment are in the health services management program and who hold academic rank [Assistant, Associate, or Full Professor].

[COMMENT: In university settings where appointments are not related to programs the program must demonstrate how they meet the intent that there be at least two full-time faculty members responsible for the program.]

[b] Faculty must have demonstrated scholarly and/or professional activity in health services management and at least one full-time faculty person must possess an earned doctoral degree in an area related to health services management.

[c] In colleges or universities in which undergraduate and graduate programs share faculty, the program must demonstrate how it meets the intent of both [a] and [b] above.

3. Resources

Given the mission, goals, and objectives of the program, the Program must demonstrate the adequacy of resources in the following areas:

[a] Financial base.

[COMMENT: The program must have adequate financial resources to support the operations of the program including faculty, research, and students.]

[b] Physical facilities.

[COMMENT: This generally includes such things as office space, classrooms, library, and computer facilities.]

[c] Academic resources within the University.

[COMMENT: This frequently includes such things as student advising and placement, other divisions of the university which offer courses related to health services administration, liberal arts resources, etc.]

[d] Practicum/Internship sites and linkages to the professional community.

[COMMENT: Practicum/internship sites must be consistent with the Program's mission, goals, and objectives. The program must have established relationships with the appropriate professional communities.]

4. Student Support Systems

The program must demonstrate that student support systems have been formally designed and implemented to ensure appropriate and equitable entry into the profession of health services management.

[a] The Program must demonstrate that the procedures for admitting students to the program are compatible with the mission, goals, and objectives of the program.

[b] Students must have access to adequate academic advising and career placement.

[c] The Program must demonstrate how the program provides students with opportunities for professional socialization and development.

B. Educational Process

1. Curriculum

The Program must have a curriculum which is consistent with its mission, goals, and objectives and which meets the following four general content areas as well as the specific areas within each.

[COMMENT: Considerable faculty effort should be directed toward the conceptualization of the curriculum given its statement of mission, goals, and objectives. More than one content area may be covered in a single course or a single content area may be covered in multiple courses. Some content areas may be covered by courses taught in other academic units.]

[a] The liberally educated health services manager.

Since health services delivery directly impacts upon the quality of the human experience, health managers must appreciate and understand the health care system's historical, philosophical, social, economics, political and scientific foundations. Baccalaureate education is the foundation for further formal and informal learning. Undergraduate education must provide the essentials of a liberal education. Therefore, liberal arts education is the foundation for professional education in health services management. A program must demonstrate how the following areas are integrated into the professional education curriculum of the program:

1. Communications [including written and oral].
2. Computational skills [mathematics and quantification].
3. Critical Thinking [ability to analyze problems].
4. Societal context [historical, economic, social, political, and scientific, foundations].

[b] **Conceptual and technical competency in management.**

Health services managers derive skills and knowledge from basic management theory and practice. The Program must demonstrate how the following competencies are developed in the student's program of study:

1. **Management.**

   [COMMENT: This area usually includes, but is not limited to content in business ethics, labor relations, and theories of management.]

2. **Organization structure and function.**

   [COMMENT: This area usually includes, but is not limited to content in business law, organizational behavior, organizational design, and strategic management.]

3. **Managerial skills.**

   [COMMENT: This area usually includes, but is not limited to content in accounting, computer literacy, financial management, operations analysis, management information systems, planning/ marketing, research methods, and statistics.]

[c] **Conceptual and technical competencies in health services.**

The unique characteristics of the health care delivery system must be addressed in the student's program of study. Students must have an understanding of the interaction of health, environments, organizations, people, and the health professions. The Program must demonstrate how the following competencies are developed in the student's program of study:

1. **Determinants and measurement of health and disease.**

   [COMMENT: This content is frequently found in, but not limited to content in epidemiology and public health.]

2. **Health services organization and delivery.**

   [COMMENT: [This includes but is not limited to content covering the structure and function of a wide variety of health organizations and professions.]

3. **The unique characteristics of the economic, legal, managerial, political, and social aspects of health services organization and delivery.**

   [COMMENT: Content in this area is usually found in bioethics, health finance, health law, and health policy.]

[d] **Applications to health services management.**

The program must demonstrate the ways in which a, b, and c above are applied to health services management.

1. **Faculty supervised practicum/internship.**

[COMMENT: The Program must demonstrate how it provides all students with a faculty supervised and evaluated field experience in health services management. If students are excused from this requirement, the Program must demonstrate that an appropriate evaluation process is used to make such a determination.]

2. Integrative exercises.

[COMMENT: The program must demonstrate the mechanisms it uses to integrate the skills and knowledge identified in a, b, and c. This is frequently in a capstone course, case studies, simulations, etc.]

C. Outcome criteria for programs in health services management.

Baccalaureate education in health services management is designed to provide the initial education for professional careers in health services management. The program must demonstrate how it develops the following competencies.[1]

1. Conceptual competence.

[COMMENT: The graduate understands the theoretical foundations of the profession.]

2. Technical competence.

[COMMENT: The graduate can perform skills required of the professional.]

3. Integrative competence.

[COMMENT: The graduate can integrate theory and skills in the practice setting.]

4. Career marketability.

[COMMENT: The graduate has superior employment opportunities because of acquired training.]

5. Communications.

[COMMENT: Acquire, develop and convey ideas and information.]

6. Critical thinking.

[COMMENT: Develop analytical skills and make decisions.]

7. Societal contexts.

[COMMENT: Historical, social, economic, political, and scientific foundations.]

8. Professional socialization and ethics.

[COMMENT: Roles in ethical bases of professional behavior.]

9. Leadership capacity.

[COMMENT: Assumes leadership roles as appropriate.]

10. Professional growth and motivation for continued learning.

IV. PROGRAM EVALUATION

The program should demonstrate its formal systems for program evaluation.

[1] The Program must regularly and systematically evaluate its outcome structure, processses and outcomes.

[2] The Program must provide the mechanisms for student, faculty, alumni and practitioner input into program evaluation.

[3] The Program must indicate what progress has taken place since the last review, noting especially any actions taken with regard to recommendations from the previous review.

1. The outcomes listed below are similar to those identified as important in other undergraduate professional fields. This list has been adapted from: J.S. Stark and M.A. Lowther, Strengthening the Ties That Bind: Integrating Undergraduate Liberal and Professional Study, University of Michigan, 1988. Similar discussions of outcomes appear in E.L. Boyer, College: The Undergraduate Experience in America, New York: Harper and Row, 1987 and the Association of American Colleges, Report of the Project on Redefining the MMeaning and Purpose of Baccalaureate Degrees: Integrity in the College Curriculum, Washington, D.C.: The Association, February, 1985.

Appendix D

Mailing lists and detail

FIPSE/Professional Preparation Project
Janie C. Knieper

Report on "Ties" and "PLUSS" Mailings/Orders
as of 8/25/88

Printed 5/31/88, FIPSE Professional Preparation Project report Strengthening the Ties That Bind ("Ties"). Number printed = 5,000 copies

Printed 5/31/88, PLUSS: Version A - 1,400 printed
Version B - 1,800 printed
Version C - 3,000 printed
Version D - 3,000 printed

Note: PLUSS* refers to a set of 1 of each version (A, B, C, D) or "PLUSS review set"

Printed 5/31/88, brochures (for publicity, ordering) = 30,000 (at least one was included with each report listed below)

Embargoed, advance complimentary mailing of "Ties" and "PLUSS" - sent 5/31/88:

# Ties	# PLUSS*	# Brochures	Group	
46	46	92	1	Network members, advisory panel, network guests
85	85	170	2	Presidents, Vice Presidents & Dean or Chairperson at PPP paticipating institutions
31	31	62	3	Specialized accreditors
308	308	616	4	Association Heads (Policy Makers), UM President, Vice Presidents/Deans, NCRIPTAL Senior Staff, and PPP Staff
267	267	534	5A	Education Writers of America, List #1 (most important)
222	0	444	5B	Education Writers of America, List #2
11	0	22	5C	Other editors (of Newsweek, Time, etc.)
970	737	1940		Subtotal of complimentary copies sent out 5/31/88

Regular complimentary mailing of "Ties" (and brochure) only - sent 6/23/88:

# Ties	# PLUSS*	# Brochures	Group	
2690	0	2690	6	Presidents and Vice Presidents of Academic Affairs of all 4 year colleges and universities

Mass mailing of PPP brochures:

# Ties	# PLUSS*	# Brochures	Group	
0	0	256	7	Persons interested in and/or somehow connected with PPP not listed elsewhere - sent 7/20/88
0	0	1188	8	Chair, Dean of 8 professional programs in U.S. (who responded to the original survey) - sent 7/5/88
0	0	901	9	Presidents of community colleges and all other colleges not in Group #6. - sent 7/5/88
0	0	2345		Subtotal for Groups 7, 8, and 9

Complimentary copies (in addition to mass mailings above) sent (as of 8/25/88):

# Ties	# PLUSS*	# Brochures	
94	5	93	"Free Ties" list
132	30	200	No. of other copies given out /filed by PPP/NCRIPTAL staff (very approximate)

Number of documents shipped to date (one brochure is usually included with each order) for orders placed:

# Ties	# PLUSS*	# Brochures	
437	79	385	Shipped prior to 8/1/88
652	124	341	Shipped 8/1 -25/88
1089	203	726	Subtotal of documents shipped prior to 8/26/88

# Ties	# PLUSS*	# Brochures	
4975	975	7994	Grand total of documents sent out/given away/filed

Approximate number of documents remaining in stock as of end of 8/25/88:

# Ties	# PLUSS*	# Brochures
25	425	22006

Approx. number remaining of each version of PLUSS

Ver. A = 425
Ver. B = 825
Ver. C = 2025
Ver. D = 2025

Approximate number of orders yet to be filled as of end of 8/25/88:

87 orders to fill (most are for 1 copy of report and 1 copy of PLUSS - no amount greater than 10 copies of the report)

Professional Project Mail Lists

Several mailings were made between May 31 and July 31 with respect to publicity about/complimentary distribution of the Professional Preparation Project report, Strengthening the Ties That Bind: Integrating Undergraduate Liberal and Professional Study.

A brief description of each group mailing follows:

Group 1: Consisted of all Professional Preparation Project staff, members, advisory panel and FIPSE-affiliated guests. There were 46 persons in this group. They each received a copy of the report, the PLUSS, and two brochures.

Group 2: Consisted of President, Vice President and a "significant other" (Dean, Chairperson) for all institutions who participated in the Professional Preparation Project. There were 85 persons in this group (ranged from three to seven persons at each of 23 institutions).

Group 3: Consisted of specialized accreditors for four-year discipline programs some of which were affiliated with our grant as advisors, network members or guests. There were 31 persons in this group. They each received a copy of the report, the PLUSS, and two brochures.

Group 4: Consisted of association heads, policy makers (i.e., legislators, governmental officials who might have/have interest in this project, educators of importance, etc.), University of Michigan President, Vice Presidents and Deans, NCRIPTAL Senior Staff, and Professional Preparation Project Staff. There were 308 persons in this group. They each received a copy of the report, the PLUSS, and two brochures.

Group 5: Consisted of three mailing lists of the first two of which were members of the Education Writers of America (EWA). List A contained the most important EWA members. There were 267 persons on this list and they each received one copy each of the report, the PLUSS and two brochures. List B contained EWA members of less importance. There were 222 persons on this list. They received one copy of the report and two brochures. The third, and smaller, list C were editors of such publications as Newsweek and Time. There were 11 persons on this list. They each received one copy of the report and two brochures.

Group 6: Consisted of Presidents and Vice Presidents of Academic Affairs of all four-year colleges and universities (except University of Michigan). This group contained 2,690 persons and each were sent one copy each of the report and brochure.

Group 7: Consisted of persons interested in and/or somehow connected with the Professional Preparation Project not listed elsewhere. This group contained 256 persons and they each were sent one brochure.

Group 8: Consisted of the Chair or Dean of eight professional programs in the U.S. who responded to the original PPP survey. This group consisted of 1188 persons and each were sent one brochure.

Group 9: Consisted of Presidents of community colleges, other two-year colleges and any other colleges not sent to in Group 6. This group consisted of 901 persons and each were sent one brochure.

Appendix E

Workshop description

WORKSHOP OUTLINE

USING THE PROFESSIONAL/LIBERAL UNDERGRADUATE SELF STUDY (PLUSS)

In 1988 a FIPSE-funded project at University of Michigan published Strengthening the Ties That Bind: Integrating Undergraduate Liberal and Professional Study urging faculty to identify and discuss educational outcomes common to liberal and professional study. The report has been received enthusiastically by the higher education community and is stimulating discussion on campuses nationally.

The project also released the Professional/Liberal Undergraduate Self-Study (PLUSS) to guide faculty discussions about improving curricular integration. While a decision to use PLUSS may originate with institutional leaders, the collegial discussions will involve one or more undergraduate professional programs (e.g., nursing, business, architecture) and appropriate liberal arts faculty, and it can involve students and recent graduates.

Participants in this workshop will learn how and when to use PLUSS. After the workshop, they will be able to initiate and help sustain discussions on their own campuses. Ideally, more than one participant from a campus will attend. Copies of PLUSS and related materials will be supplied.

Workshop Leaders: Joan S. Stark and Malcolm A. Lowther, Professors, Center for the Study of Higher and Postsecondary Education, The University of Michigan

Appendix F

Executive Summary

The School of Education/The University of Michigan. Ann Arbor, Michigan

Although some claim the growth of professional preparation programs has been at the expense of liberal studies, the two areas are not mutually exclusive. The active promotion of liberal education outcomes, within education for professional fields, is a realistic strategy consonant with both the career aspirations of today's undergraduate students and the importance of a liberal education. Educational activities contributing to the liberal outcomes of professional study exist in many colleges and universities. However, lack of communication mechanisms, within and between professional programs, often leave these ideas unnurtured.

In 1986 a national dialogue was initiated among professional and liberal arts faculty to share organizational strategies and educational activities that successfully integrate professional and liberal studies. An eleven-member advisory panel representing eight undergraduate professional fields (architecture, business administration, engineering, journalism, nursing, pharmacy, social work and teacher education), the liberal arts and specialized accrediting associations is guiding this process. In addition, a chosen network of 16 professional faculty members, 16 liberal arts faculty members and accreditors from the eight professional fields is meeting periodically over an 18-month period to facilitate information exchange.

The project increased awareness among faculty and administrators about liberal education practices occurring in the eight professional fields. A report and call to action, entitled Strengthening the Ties That Bind: Integrating Liberal and Professional Education, was released in summer 1988. Over 5,000 copies have been distributed. A self-study instrument, The PLUSS, has been developed for professional programs. Its use as a discussion guide encourages specification of program goals, helps to identify influences affecting specific programs as they attempt to integrate professional and liberal study, and advances discussions of the the measurement of liberal outcomes in undergraduate professional programs. Information concerning the project's work was shared nationally through press releases, extensive mailings, and collaborative presentations at professional conferences. The numbers of orders for materials and requests for staff to speak have indicated the need for such a dialogue. The work was sponsored by the Fund for the Improvement of Postsecondary Education and The University of Michigan.

Project Director:
Joan S. Stark

Project Co-Director:
Malcolm A. Lowther
The University of Michigan
2002 School of Education
Ann Arbor, Michigan 48109

ppp
The Professional Preparation Project
The University of Michigan

Appendix G

Institutions ordering 15 or more copies of Strengthening the Ties...

Institutions ordering 15 or more copies
of Strengthening the Ties...

Name	Location	# of copies
Evergreen State College	Olympia, WA	15
Keene State College	Keene, NH	20
Kennesaw College	Marietta, GA	17
King's College	Wilkes-Barre, PA	100
La Roche College	Pittsburgh, PA	30
Nazareth College	Rochester, NY	20
Penn. State University	University Park, PA	20
Trenton State College	Trenton, NJ	85
University of Puerto Rico	Mayaguez, PR	100
University of San Francisco	San Francisco, CA	40

Appendix H

Letters, etc.

Syracuse University

18 May 1988

Joan S. Stark and
Malcolm A. Lowther
The University of Michigan
2117 School of Education Bldg.
Ann Arbor, Michigan 48109

Dear Joan and Malcolm,

Congratulations. Strengthening the Ties That Bind is right on target. It reads well and represents most appropriately the evolution and conclusions of the Network. It is realistic without pessimism or optimism, encouraging without cheerleading. I think it's going to have a very positive impact over the long haul precisely because it is not a quick fix and it summons "the best" from those who are going to have to stand up and be counted.

I'm sure all those who served on the Network and its special committees would agree that your "spirit" and "quiet confidence" has, more than anything else, informed the successful completion of this task. So from one who has benefitted, please accept my thanks and congratulations.

Sincerely,

Ronald R. Cavanagh
Vice President for
Undergraduate Studies

RRC:jlo

MAY 23 1988

366

Vice President for Undergraduate Studies
304 Administration Building • Syracuse, NY 13244-1100 • (315) 423-1899

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

College of Liberal Arts

Office of the Dean

June 2, 1988

Ms. Joan S. Stark
Mr. Malcolm A. Lowther
The University of Michigan
2117 School of Education Building
Ann Arbor, Michigan 48109

Dear Ms. Stark and Mr. Lowther,

I write to thank you for the very interesting and useful work contained in Strengthening the Ties that Bind. I believe your concerns and approach are well founded.

Simply as a way of indicating to you activity consistent with your approach, I enclose some material from a recently held symposium on the relationship between Liberal Arts and Business held here at The University of Tennessee, Knoxville.

Dean Wisniewski of our College of Education and I are planning a number of activities intended to bring liberal arts and teacher education faculty into a dialogue.

Again, thanks for the material. It will help us move ahead.

Sincerely,

Larry Ratner
Dean

/lc
Enclosures

226 Ayres Hall / Knoxville, Tennessee 37996-1320 / (615) 974-5331

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DAVID R. REYES-GUERRA, P.E.
EXECUTIVE DIRECTOR

June 3, 1988

Dr. Joan S. Stark
Dr. Malcolm A. Lowther
Center for the Study of Higher
and Postsecondary Education
School of Education
The University of Michigan
2117 School of Education Building
Ann Arbor, Michigan 48109

Dear Drs. Stark and Lowther:

Thank you for including me in your May 31, 1988 mailing of advance copies of your work on integrating undergraduate liberal and professional study. I found it very informative.

The Accreditation Board for Engineering and Technology (ABET) is involved in a special program regarding the social sciences and humanities in conjunction with Dr. Joseph Johnston at the Association of American Colleges, 1818 R Street, N.W., Washington, D.C. 20009. Perhaps you may be interested in sharing your work with him as well.

I am further enclosing mailing labels for the officers of ABET and of ABET's Engineering Accreditation Commission. As these individuals are in the forefront of the profession with regard to changes in curriculum, you may find it equally appropriate to send them copies of your material.

Again, thank you for the copies of the material.

Sincerely,

David R. Reyes-Guerra, P.E.
Executive Director

DRR-G:ar

1988 ANNUAL MEETING:
"Engineering Education – The Base for Competitiveness and Productivity in the International Arena"
November 28 – December 2, 1988, The Capitol Hilton, Washington, DC

Washington
State University

Office of the President, Pullman, Washington 99164-1048 / 509-335-6666

June 6, 1988

Ms. Joan S. Stark
Mr. Malcolm A. Lowther
Project Co-Directors
Center for the Study of Higher
and Postsecondary Education
School of Education
The University of Michigan
2117 School of Education Building
Ann Arbor, Michigan 48109

Dear Ms. Stark and Mr. Lowther:

Thank you for your letter of May 31, 1988, with which you enclosed an advance copy of Strengthening the Ties That Bind: Integrating Undergraduate Liberal and Professional Study.

I was most interested to skim through the materials which you sent, and I am forwarding them to Dr. A. C. Yates, Executive Vice President and Provost for WSU. I know he will be sharing these with our Commission on General Education and with other members of the administration and faculty who have been working very diligently over the last few years to improve WSU's general undergraduate education.

We were pleased that Donald Heil and Richard Law were participants in the Professional Preparation Network, and we have had reports from them since their return. They will be involved as WSU moves forward in improving undergraduate education, and your materials will be most helpful to them.

Sincerely yours,

JUN [illegible] 1988

Samuel H. Smith
President

SHS:crh

cc: A. C. Yates
Donald Heil
Richard Law

New Horizons
Washington State University
Centennial 1890-1990

CORNELL UNIVERSITY

FRANK H. T. RHODES
PRESIDENT

June 8, 1988

Professor Joan S. Stark
School of Education
Center for the Study of Higher
and Postsecondary Education
The University of Michigan
2117 School of Education Bldg.
Ann Arbor, MI 48109

Dear Joan:

Thank you for your letter of May 31, and for the published version of "Strengthening the Ties that Bind." I write not only to thank you for your kindness in sending me this, but also to congratulate you on a handsome and very useful publication. Your work reads convincingly and cogently, and I hope it will have a wide influence. Certainly, in an age of painful simplistics, your message needs to be heeded.

I want to thank you for the leadership that you have given us in this important project and to congratulate you on a difficult task well done. I feel very privileged to have had the opportunity to play a microscopic part in this.

With my warmest congratulations and all good wishes,

Sincerely yours,

Frank

Frank H. T. Rhodes

300 DAY HALL ITHACA, NEW YORK 14853-2801 (607) 255-5201

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

June 8, 1988

Office of
the Provost

Dr. Joan S. Stark and Dr. Malcolm A. Lowther
Project Co-Directors
The University of Michigan
2117 School of Education Building
Ann Arbor, MI 48109

Dear Dr. Stark and Dr. Lowther:

Thank you for providing me with an advanced copy of Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study. I will share these informative materials with others here on campus.

Sincerely,

Dr. George W. Wheeler
Provost

le

JUN 1 4 1988

505 Andy Holt Tower / Knoxville, Tennessee, 37996-0154 / (615) 974-3265

Virginia Commonwealth University

June 8, 1988

Dear Joan and Mal:

Just a note to tell you how stunning I think the final report looks. I already knew that the content would be stimulating, but I am just as pleased with the design. I hope that it will capture all the attention it deserves. You and your staff have done a first-rate job and I wish you well with it.

When I was in Dallas at the AACSB, I took up the enclosed list of names of people, mostly deans, who are interested in receiving a copy of the report. If your budget does not have enough space for more freebies, perhaps you can send them the flyer advertising it and offering it for sale. I made no promises that you would send free copies, but I did tell them I would send you the list and express their interest.

I thought the session in Dallas was ok. The deans were pretty silent and I thought things were not going well, but afterwards they told me how much they appreciated what I said. I was asked as a result to come to Butler University this week to conduct a workshop for business and L.A. faculty and to address another group of business deans in April.

Barbara and I are still trying to find a publisher for the other book. I have been slow (too many papers to grade), but a letter has gone out to a couple of prospective publishers. No response so far.

Best wishes for a good and productive summer. I still have to get to some of my own writing and stop writing reports and doing workshops. Our survey of 1500 faculty on their careers has a good response rate; data will be coming in week after next. That will keep us busy for a while.

Sincerely,

Robert Armour

JUN 1 [illegible]

Department of English • College of Humanities and Sciences • Box 2006 • Richmond, Virginia 23284-2006 (804) 367-1667

UNIVERSITY OF KENTUCKY
LEXINGTON, KY. 40506-0027

COLLEGE OF ARTS AND SCIENCES
PATTERSON OFFICE TOWER
OFFICE OF THE DEAN

June 8, 1988

Dr. Joan S. Stark
School of Education
2117 Education Building
University of Michigan
Ann Arbor, MI 48109

Dear Professor Stark:

Thank you for sending an advance copy of "Strengthening the Ties that Bind." I have circulated the copy that you provided to the professional staff in the College so that we may examine it and discuss potential uses at the University of Kentucky.

Sincerely,

Michael A. Baer
Dean

MAB:of

JUN 1 . 1988

AN EQUAL OPPORTUNITY UNIVERSITY

FOR: Joan & Mal

FROM: Rick

PHONE NO: EXT.:

TRIM* Slip

*TELEPHONE, ROUTING INFORMATION AND MESSAGE

- ☐ Called
- ☐ Returned Your Call
- ☐ Will Call Again
- ☐ Please Call
- ☐ Stopped to See You
- ☐ Wants to See You

For Your:

- ☐ Information
- ☐ Comments
- ☐ Approval
- ☐ Signature
- ☐ File

- ☐ Per Our Conversation
- ☐ For Your Handling
- ☐ Per Your Request
- ☐ Please Return
- ☐ Read and Pass On
- ☐ Please See Me

MESSAGE:

Bonnie spoke with Mary Sue Enfant and got a nice complement on our National Report. She says the people at Boston College are favorably imp ressed with the report

DATED 6/9/88 | TIME: | TAKEN BY:

FORM 7283-80

WILLIAM A. SEDERBURG
24TH DISTRICT
120 STATE CAPITOL
LANSING, MICHIGAN 48913
(517) 373-1734

THE SENATE
LANSING, MICHIGAN

COMMITTEES
APPROPRIATIONS
CHAIRMAN, HIGHER EDUCATION SUBCOMMITTEE
CHAIRMAN, GENERAL GOVERNMENT SUBCOMMITTEE
MEMBER, K-12 AND DEPARTMENT OF EDUCATION SUBCOMMITTEES
HEALTH POLICY, CHAIRMAN

June 9, 1988

Ms. Joan S. Stark
Project Co-Director
The University of Michigan
Center for the Study of Higher and Postsecondary Education
2117 School of Education Building
Ann Arbor, Michigan 48109

Dear Joan:

Thank you for sending me a copy of the recent study on Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study. I will read it with care this evening when I get home.

Again, thanks for sending me copies of the good work you do.

Sincerely yours,

Bill

William A. Sederburg
State Senator
Twenty-fourth District

WAS:es/ws_stark

JUN 1 4 1988

UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF THE ASSISTANT SECRETARY
FOR EDUCATIONAL RESEARCH AND IMPROVEMENT

June 13, 1988

Dear Joan & Mal,

Very nice job on Strengthening the Ties . . . . I think it will be an effective piece, and hope that many engage in the PLUSS process. I may not agree with the list of outcomes (yes, they are all important, but I'm not sure it's a complete list) undergraduate professional program folks put forward, but the project leaves the door open for further development of that list, and was wise to do so.

Regards,

Chris

JUN 16 1988

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WASHINGTON, D.C. 20208

UNIVERSITY OF MISSOURI-COLUMBIA

Office of the Provost

Jesse Hall
Columbia, Missouri 65211
Telephone (314) 882-6596

June 13, 1988

✓Ms. Joan Stark
Project Co-Director
Center for the Study of Higher &
Post Secondary Education

Mr. Malcolm a. Lowther
Project Co-Director
Center for the Study of Higher &
Post Secondary Education

Dear Directors Stark and Lowther:

Thank you for your letter relating the contribution of Dr. Edmund Lambeth. He is a valued faculty member and I know he served well in your deliberations.

I appreciate receiving the report, Strengthening the Ties That Bind. It will be useful to us since our university has a large number of strong professional programs.

Sincerely,

Lois B. DeFleur
Provost

LBD/js

cc: Dean James Atwater

JUN 17 1988

277

an equal opportunity institution

BELMONT
COLLEGE
NASHVILLE

FILE COPY

THE LEADERSHIP INSTITUTE
of
The Jack C. Massey Graduate School of Business

Lamar Alexander
Chairman

1900 Belmont Boulevard
NASHVILLE, TN 37212-3757
(615) 385-6459

June 14, 1988

Dr. Richard Wisniewski
Dean and Professor
College of Education
The University of Tennessee
212 Claxton Education Bldg.
Knoxville, TN 37996

Dear Richard,

Professors Stark and Lowther recently sent me an advance copy of Strengthening the Ties that Bind -- the report of the Professional Preparation Network. I was happy to learn of your participation in this project, and I congratulate you on your efforts to find ways to better link a broad liberal arts education with professional studies.

Sincerely,

Lamar

Lamar Alexander

LA:jm

pc: Jack Reese

6/20

To: Prof. Joan Stark
Univ. of Michigan -

Joan - I was pleased to receive this as I knew you will be to see it. Lamar Alexander is our former governor and he becomes President of the U. of Tn. system on July 1.

JL

JUN 20 1988

78

JUN 27 1988

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY
Ames, Iowa 50011

OFFICE OF THE PRESIDENT

June 14, 1988

Ms. Joan S. Stark
Mr. Malcolm A. Lowther
Project Co-Directors
Center for the Study of Higher
and Postsecondary Education
School of Education
2117 School of Education Building
The University of Michigan
Ann Arbor, Michigan 48109

Dear Ms. Stark and Mr. Lowther:

Thank your for your courtesy in providing me with a copy of the Strengthening the Ties that Bind. The report is timely and thought provoking, and it will be especially useful to us here at Iowa State in some of our on-going curricular discussions.

We're grateful to you for fostering national debate on this subject and adding to its substance with such an excellent report.

Sincerely yours,

Gordon P. Eaton
President

JUN 20 1988

BELMONT
COLLEGE
NASHVILLE

THE LEADERSHIP
INSTITUTE
of
The Jack C. Massey
Graduate School
of Business

Lamar Alexander
Chairman

1900 Belmont Boulevard
NASHVILLE, TN 37212-3757
(615) 385-6459

June 14, 1988

Ms. Joan S. Stark
Mr. Malcolm A. Lowther
Project Directors
Center for the Study of Higher
and Postsecondary Education
The University of Michigan
2117 School of Education Bldg.
Ann Arbor, MI 48109

Dear Professors,

Thank you for sending me an advance copy of Strengthening the Ties that Bind -- the report of the Professional Preparation Network. I was happy to learn of Dr. Wisniewski's participation in this project, and I congratulate you on your efforts to find ways to better link a broad liberal arts education with professional studies.

Sincerely,

Lamar Alexander

LA:jm

80

Jun 16 1988

THE SPENCER FOUNDATION

JOHN HANCOCK CENTER
875 NORTH MICHIGAN AVENUE
CHICAGO, ILLINOIS 60611

(312) 337-7000

June 15, 1988

Dr. Joan S. Stark
Director
National Center for Research to Improve
Postsecondary Teaching and Learning
Suite 2400, School of Education Building
The University of Michigan
Ann Arbor, Michigan 48109-1259

Dear Joan:

Thank you for your thoughtful note and for the copies of the report on liberal and professional study. As you know, I have been watching your progress with interest, and saw a recent article describing the results of your research in the Chronicle of Higher Education. We are honored to be cited as supporters.

Hope all is going well with you and do hope our paths will cross again soon.

With best wishes,

Sincerely yours,

Marion

Marion M. Faldet
Vice President

MMF/grn

JUN 17 1988

Ernest A. Lynton
14 Allerton Street
Brookline,MA 02146
(617) 232 5046

June 15, 1988

Dr. Joan S. Stark
Professional Preparation Project
2400 School of Education
University of Michigan
Ann Arbor, MI 48109-1259

Dear Joan,

I was delighted to read in the Chronicle about the report of the Professional Preparation Project. With the publicity it is receiving, it should move higher education a goodly distance further into the direction which some of us have been advocating for quite some time. I don't know whether you have come across Sandra Elman's and my recent book, New Priorities for the University. In it we argue strongly for the integration of professional and liberal-arts subject matter into a coherent curriculum.

PCK # 3551
JS 6/17/88

I would very much like to have a copy of the report, and enclose a check for $ 15. If you have any complimentary copies available, could you send one to

Dorotea Furth
O.E.C.D.
2, rue Andre-Pascal
75775 Paris Cedex 16
France.

O.E.C.D. is just starting a study of professional education in several countries. The relationship of liberal and professional subject matter is one of the key points we will pursue. Your report will provide very useful background material.

I want to take this opportunity as well to ask that you make a note of my availability as a consultant during the coming years - and perhaps also to point it out to others. As of September, 1988, I am taking advantage of a time-limited opportunity to enter a generous early retirement scheme. The arrangement calls for a continuing post-retirement reappointment on a half time basis for as long as the university and I are both willing, and leaves the other half of my time for external activities.

I would like to make full use of this other half, because I consider the change in status as constituting "retirement" only in a technical sense. I anticipate a shift rather than a lessening of my activities. At the University, I will

JUN 17 1988

continue to work closely with Zee Gamson in our recently established New England Resource Center for Higher Education and will be involved also in a number of other activities. But the absence of regular teaching and the reduction in my University workload will make it possible for me to be away from the campus for more than one or two days at a time. Thus I would be free to participate in a small number of substantial projects rather than to take on many short consulting assignments.

I would be very much interested in being involved if there is to be any follow-up on the work of the Professional Participation Project. There may also be, now or in the future, other activities of the Center to which I could contribute. I would be grateful if you would keep me in mind should an opportunity for my participation arise, or if appropriate projects elsewhere come to your attention. Of course I would also appreciate any suggestion you can make with regard to other avenues I might explore.

Thank you in advance. With best wishes and regards,
sincerely yours,

Ernest A. Lynton
Commonwealth Professor,
University of Massachusetts at Boston

Highland Community College

thanks and thanks again!

JUN 2 : 1988

DIVISION OF SOCIAL SCIENCE AND BUSINESS
JUNE 15, 1988

JOAN STARK
NATIONAL CENTER FOR RESEARCH TO IMPROVE POSTSECONDARY TEACHING AND LEARNING
SUITE 2400, SCHOOL OF EDUCATION BUILDING
THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN 48109-1259

DEAR JOAN:

I WISH TO THANK YOU FOR THE REPRINTS. THAT WAS A SPLENDID GESTURE.

THE REPRINTS, "REFLECTIONS ON COURSE PLANNING," WILL BE THE BASIS FOR MY DIVISION'S IN-SERVICE THIS AUGUST.

AGAIN, THANKS FOR THE MATERIALS.

JOHN ALAN DAVIS

Box 68 • Highland, Kansas 66035 • (913) 442-3236
Oldest Institution of Higher Learning in the State of Kansas

LYNCHBURG COLLEGE
LYNCHBURG, VIRGINIA 24501

OFFICE OF THE PRESIDENT

June 16, 1988

Dr. Joan Stark
Director of Professional
Preparation Network
University of Michigan
2400 School of Education Building
Ann Arbor, MI 48109-1259

JUN 23 1988

Dear Joan:

I was delighted, first of all, to see your picture in the June 8 **Chronicle** and then to read the report which you and your colleagues at Ann Arbor submitted on the relationship between liberal arts and professional study. This is a matter which has interested and concerned me and was one of the reasons why I was attracted to Lynchburg College. There is a history here of feeling that the liberal arts and professional subjects are not in conflict with each other as a matter of definition. It has also been considered important here to provide students with both kinds of education in exactly the way that your report articulates. In fact, we have just been reclassified by the Carnegie people as a comprehensive institution rather than a liberal arts college. My interest, therefore, is in having available to the faculty here the articulation of our position which sounds exactly like what you have done in your report.

I would be grateful, therefore, Joan if you would send me three copies of the report and the guidebook together with a bill, which I will pay promptly.

It was good to catch up with you briefly in Washington. I remember our times together at Kalamazoo and delight that you are continuing to do important things professionally. Thank you, particularly, for sharing your insight with the rest of us.

Give my warmest regards to my friends in the School of Education.

~~Very~~ sincerely,

George N. Rainsford
President

GNRdc

THE UNIVERSITY OF MICHIGAN
SCHOOL OF
NURSING

June 16, 1988

Joan S. Stark
Project Co-Director
Center for the Study of Higher and
Postsecondary Education
School of Education
Room 2117, Box 1259

Dear Ms. Stark: Joan

I appreciate receiving your latest report, Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study. I look forward to reading it. I also wanted you to know how much I enjoyed the book you published with Bonnie Hagerty.

Sincerely,

Rhetaugh

Rhetaugh G. Dumas, Ph.D., R.N.
Dean and Professor

RGD/lpb/cp

N:stark

JUN 21 1988

OFFICE OF THE DEAN
1325 Catherine Road • Ann Arbor, Michigan 48109-0604

Iowa State University of Science and Technology Ames, Iowa 50011-1070

Social Work Program
203 East Hall
Telephone: 515-294-1705

June 16, 1988

Dr. Joan Stark
Dr. Malcolm Lowther
2400 School of Education Building
The University of Michigan
Ann Arbor, MI 48109-1259

Dear Joan and Mal,

As this chapter in my life closes, I want you to know how much I enjoyed my work with you and the PPP. New areas of professional growth and development have been openned, ones which will serve Iowa State and my professional program very well. Rest assured I will also work towards change in my profession as well. I am sure you know how important it is to have one's professional life reinvigorated. Thanks to you, my life is enriched. Best wishes, until our paths cross again...

Cordially,

Stephen M. Aigner /jr

Stephen M. Aigner, Ph.D.
Director, The Social Work Program

SMA:jr

cc: Harold Johnson

JUN 21 1988

THE UNIVERSITY OF MICHIGAN
HORACE H. RACKHAM
SCHOOL OF GRADUATE STUDIES
ANN ARBOR, MICHIGAN 48109-1070

JOHN H. D'ARMS, DEAN
(313) 764-4400

June 23, 1988

Professor Joan S. Stark
Professor Malcolm A. Lowther
Center for the Study of Higher
and Postsecondary Education
2117 School of Education Building

Dear Professors Stark and Lowther:

Thanks for sending us the report on Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study. It will be a valuable addition to our library.

Yours sincerely,

John H. D'Arms
Dean

JHD/lc
3678D

JUN 24 1988

UNIVERSITY OF HAWAII • HONOLULU, HAWAII 96822

PRESIDENT

June 24, 1988

JUL 6 1988

Professor Joan S. Stark
Professor Malcolm A. Lowther
Project-Co-Directors
Center for the Study of Higher
and Postsecondary Education
The University of Michigan
2117 School of Education Building
Ann Arbor, Michigan 48109

Dear Professors Stark and Lowther:

Thank you for your letter of May 31, 1988, and for the copy of "Strengthening the Ties that Bind," and the "PLUSS" booklets.

Dean Seymour has indicated to me that he and Dean Botsai found the experience of working on this project to be highly stimulating. They have initiated dialog on the University's Manoa Campus among the deans, and curricular changes have already begun. In light of these discussions, I feel that the University of Hawaii will benefit greatly in the area of undergraduate education in both professional and liberal arts areas.

Thank you once more for sending the copy of the report. I shall look forward to seeing the results of your pioneering project.

Cordially yours,

Albert J. Simone
President

AN EQUAL OPPORTUNITY EMPLOYER

Valparaiso University
College of Engineering

Office of the Dean
219-464-5121

Valparaiso, Indiana
46383

June 26, 1988

Professor Joan S. Stark
Co-Director of the Professional Preparation Network
University of Michigan
2400 School of Education Building
Ann Arbor, MI 48109 - 1259

Dear Professor Stark:

After reading about your program in the June 8, 1988 Chronicle, I thought you might be interested in the enclosed paper which I recently presented at a symposium on our campus. I trust the paper will be of interest to you or others in your program.

Sincerely,

Stuart G. Walesh

Stuart G. Walesh, PE, PhD

SGW/tn

Enclosure: Paper

JUN 2 1988

University of Nebraska Lincoln

Office of the Chancellor
201 Administration Building
Lincoln, NE 68588-0419
(402) 472-2116

July 6, 1988

Ms. Joan S. Start, Project Co-Director
Mr. Malcolm A. Lowther, Project Co-Director
Center for the Study of Higher
and Postsecondary Education
The University of Michigan
2117 School of Education Building
Ann Arbor, MI 48109

Dear Ms. Start and Mr. Lowther:

Thank you for providing me with a copy of the Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study report. I do appreciate having a copy, and thoroughly enjoyed reading the information contained therein.

Both of you are to be commended for your efforts in developing this interesting report, and the information contained therein will be useful as we continue to maintain and upgrade the quality of education at the University of Nebraska-Lincoln.

Again, it was most thoughtful of you to provide this information for our use.

Sincerely yours,

M. A. Massengale

M. A. Massengale
Chancellor

MAM:jbs

JUL 12 1988

COLLEGE OF NOTRE DAME OF MARYLAND

July 7, 1988

Joan S. Stark
Project Co-Director
School of Education
The University of Michigan
2117 School of Education Building
Ann Arbor, MI 48109

Dear Joan,

I have just finished reading Strengthening the Ties that Bind and I want to congratulate you and your co-director for an outstanding piece of work. This booklet will be food for thought for our academic dean, our faculty, and our curriculum committee.

On a personal note, I am delighted to see how you have advanced in your career since your days in Baltimore. It is delightful to find you now in a position to influence higher education profoundly. You certainly have been doing this in various ways all of your career, but I suspect you will be able to exert more leadership now with the publication of this excellent booklet.

I hope you will get the satisfaction of knowing that many people read it and are influenced by it. That really is the best satisfaction for any author.

Sincerely,

Kathleen Feeley, SSND
President

pdd

JUL 12 1988

Office of the President / 4701 N. Charles Street / Baltimore, Maryland 21210-2476 / (301) 532-5300

NEW ENGLAND COLLEGE

American Campus
Office of the Vice President for Academic Affairs
Telephone: (603) 428-2237

Henniker, New Hampshire 03242-0791, USA • Arundel, Sussex BN 18 0DA, England

July 7, 1988

Ms. Joan S. Stark
Project Co-Director
Center for the Study of Higher and Postsecondary Education
217 School of Education Building
The University of Michigan
Ann Arbor, Michigan 48109

Dear Ms. Stark:

Thank you for sending us a copy of STRENGTHENING THE TIES THAT BIND. It is a fascinating and extremely useful work: one which will have a significant impact upon the curricular and, so to speak, the philosophical reform exercises which we are undertaking at New England College.

Our President, Dr. William R. O'Connell, Jr., often has spoken to me of you and of the Center. I very much hope that one day soon we may be able to meet. Until then, I send my congratulations for your work and my warm wishes. If ever you may be in our areas in New Hampshire or West Sussex, England, I hope that you will visit with us.

With my best wishes, I am,

Very truly yours,

Peter Glassman
Vice President for Academic Affairs
Dean of Faculty

PG/j

JUL 13 1988

The University of Alabama at Birmingham
Office of the President
205/934-4636

July 12, 1988

Ms. Joan S. Stark
Mr. Malcolm A. Lowther
Project Co-Directors
The University of Michigan
School of Education
Center for the Study of Higher
and Postsecondary Education
2117 School of Education Building
Ann Arbor, Michigan 48109

Dear Ms. Stark and Mr. Lowther:

I have received your letter dated June 21, 1988, and the enclosed copies of Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study. Although I have not read your report, the title is very inviting and examines an important issue in higher education. I will certainly look forward to reading it and want to thank you for providing a copy to this institution.

Sincerely,

Charles A. McCallum, D.M.D., M.D.
President

CAMcC/kcw

JUL 18 1988

UAB Station / Birmingham, Alabama 35294
An Affirmative Action / Equal Opportunity Employer

Nova University
OFFICE OF THE PRESIDENT
3301 College Avenue, Fort Lauderdale, Florida 33314 • 305/475-7575

Abraham S. Fischler
President

July 13, 1988

Ms. Joan S. Stark
Project Co-Director
School of Education
The University of Michigan
Center for the Study of Higher
And Postsecondary Education
2117 School of Education Building
Ann Arbor, Michigan 48109

Dear Joan:

Just got through reading your monograph entitled **Strengthening The Ties That Bind.** I could not agree with you more. Nova University has just reorganized a division of Nova College called **The Liberal Studies Program.** Students go to school forty-five weeks a year. The circles in the diagram represent attendance at a minimum of three hours a day, five days a week thus providing an opportunity for experiential and a variety of teaching methods. The English, math and the major are all done in peer group tutorial modes integrating what was emphasized in the liberal studies area. Students proceed at their own pace. There are mentors available for direct assistance but cooperative learning is encouraged. Ours is a three calendar year with formal instruction taking place 135 weeks instead of the 120 weeks in our traditional academic year calendar. As you can see, the program provides for fifteen weeks of additional instruction, thus eliminating one year's tuition and one year's time giving the individual that year in the workplace.

I would be interested in your reaction to the above.

I am glad that you are continuing to enjoy good health and are enthusiastic about what you are doing. I am looking forward to having our paths cross again.

Sincerely,

Abraham S. Fischler
President

ASF:bj
enclosure

JUL 18 1988

Whittier College

WHITTIER, CALIFORNIA 90608 (213) 693-0771

July 15, 1988

Professor Joan S. Stark
Professional Preparation Project
University of Michigan
2400 School of Education Bldg.
Ann Arbor, MI 48109-1259

Dear Professor Stark,

I read with interest the June 8, 1988 Chronicle of Higher Education story about your work, and have recently received a copy of Strengthening the Ties that Bind.

I am writing to you to bring Whittier College and our programs to your attention. Whittier College has been concerned with the issue of integrating professional programs into the liberal arts for some time now, and we have implemented programs to address the problem. Whittier has 1500 students, 500 of whom are law students in a separate ABA-accredited law school near downtown Los Angeles. The main campus is located 18 miles east of Los Angeles, and provides primarily an undergraduate program designed to integrate professional and pre-professional programs into the liberal arts core of the college. Our professional programs include applied art, business administration, communication disorders, teacher training, and pre-law and pre-medicine.

Not only do we require all students to complete a 41-unit liberal education core program, but through the innovation of "pairs of courses" we integrate the professional curricula with the liberal arts. Nearly one-half of the 41-unit liberal education program is taken in interdisciplinary pairs. Pairs are two courses with overlapping themes or problems that students take concurrently in the same semester. These pairs are planned to enable students to explore the connections between disciplines and approaches to issues. Many of the pairs link a course in the traditional liberal arts with a course in the professional field (business administration with a psychology or sociology course, or a pre-med biology course with an ethics course, for example). We now have 6 years experience with this curriculum, having begun it in 1982. We are further integrating the business administration program into the liberal arts through the use of "pairs," and are now in the process of revising the education curriculum to accomplish that as well.

In addition, we have established a special program with the Otis/Parsons Art Institute to enable our students to obtain both the B.A. and B.F.A. degrees in five years. The intent

JUL 21 1988

of the program is to provide a strong grounding in the liberal arts for professional artists. We began this program last year, and are looking forward to the second year this fall.

I could go on at some length about both of these programs, but the point is that Whittier College has experience in devising curricular solutions to the problem of integrating undergraduate liberal and professional study. I would be most interested in linking up with the "Professional Preparation Network" both to share our experiences, and to learn from other members of the network. Of course if you or other members of the Network are ever in southern California, you are cordially invited to visit Whittier.

I look forward to hearing from you.

Sincerely yours,

Robert B. Marks
Vice President for Academic Affairs and
Dean of Faculty

KENNESAW COLLEGE

OFFICE OF THE PRESIDENT
MARIETTA, GEORGIA 30061
(404) 423-6211

July 15, 1988

Dr. Joan S. Stark
Project Co-Director
Center for the Study of Higher
and Postsecondary Education
The University of Michigan
2117 School of Education Bldg.
Ann Arbor, Michigan 48109

Dear Joan:

I am looking forward to discussing with my education faculty the report you recently sent me entitled, "Strengthening the Ties that Bind: Integrating Undergraduate Liberal and Professional Study." Thanks for making this timely and important statment available to those of us in higher education.

I recall with pleasure our recent meeting at the education conference sponsored by the University Center in Atlanta. Hopefully our paths will cross again in the future. I'd like that very much.

Again, my thanks, along with my warm personal regards.

Sincerely,

Betty L. Siegel
President

BLS:lkj

JUL 21 1988

Elizabeth City State University

ELIZABETH CITY, NORTH CAROLINA 27909

OFFICE OF THE CHANCELLOR (919) 335-3230

July 18, 1988

Ms. Joan S. Stark
Project Co-Director
The University of Michigan
School of Education
2117 School of Education Bldg.
Ann Arbor, Michigan 48109

Dear Ms. Stark:

Thank you for the complimentary copy of Strengthening the Ties that Bind: Integration Undergraduate Liberal and Professional Study. I have scanned the book and look forward to sitting down to actually read it. It appears to be one that I will certainly be able to use as a part of my personal library.

Again, thank you and please keep me on your mailing list.

Respectfully yours,

Jimmy R. Jenkins
Chancellor

JRJ/srw

JUL 21 1988

JIMMY R. JENKINS, Chancellor
Elizabeth City State University is a constituent institution of
THE UNIVERSITY OF NORTH CAROLINA

Elizabeth City State University

ELIZABETH CITY, NORTH CAROLINA 27909

OFFICE OF THE CHANCELLOR

(919) 335-3230

July 18, 1988

Mr. Malcolm A. Lowther
Project Co-Director
The University of Michigan
School of Education
2117 School of Education Bldg.
Ann Arbor, Michigan 48109

Dear Mr. Lowther:

Thank you for the complimentary copy of Strengthening the Ties that Bind: Integration Undergraduate Liberal and Professional Study. I have scanned the book and look forward to sitting down to actually read it. It appears to be one that I will certainly be able to use as a part of my personal library.

Again, thank you and please keep me on your mailing list.

Respectfully yours,

Jimmy R. Jenkins

Jimmy R. Jenkins
Chancellor

JRJ/srw

JIMMY R. JENKINS, Chancellor
Elizabeth City State University is a constituent institution of
THE UNIVERSITY OF NORTH CAROLINA

Monterey Institute of International Studies

Ms. Joan S. Stark
School of Education
The University of Michigan
2117 School of Education Building
Ann Arbor, Michigan 48109

20 July 1988

Dear Ms. Stark,

We have just received your excellent report on Integrating Undergraduate Liberal and Professional Study and I wish to congratulate you and your co-workers on this unique effort to establish a much needed link between undergraduate education and those involved in preparing graduate students for our nation's most important professions.

Among these critical professions are those of translators and interpreters. Translation and interpretation are by now fully established as accredited professional disciplines within the academic world, both in Europe and in the United States. We have the only two-year M.A. program in these fields in the U.S. and this Division is fully accredited by the International Association of University Schools of Translation and Interpretation (C.I.U.T.I.). We also offer the only such programs for Chinese and Japanese in the Western Hemisphere and we are expecting major Congressional funding to establish an International Trade Enhancement Center here at the Institute.

I am enclosing a brochure for your perusal.

I would be most interested in learning more about your plans concerning follow-up activities in your Department. In the event that you are planning any, we would be more keen to cooperate and to add our professional field to the ones already covered in your report.

JUL 26 1988

Translation and Interpretation Division
425 Van Buren Street, Monterey, CA 93940 (408) 647-4185

We are facing at times, insurmountable problems which stem from a poor preparation of undergraduate language and literature students for our graduate work and we welcome any opportunity to gain influence in the undergraduate liberal arts "world" to remedy this unfortunate situation which eventually costs our government and our corporations millions of dollars in lost opportunities when dealing with foreign countries.

Any suggestions you may have in this matter would be most appreciated.

Sincerely,

Wilhelm K. Weber, Dean
Graduate Division of
Translation and Interpretation

WKW:mmt

Enclosure

FOR: Joan / Mal

FROM: President Gardner

PHONE NO: EXT.:

TRIM* Slip

*TELEPHONE, ROUTING INFORMATION AND MESSAGE

☑ Called	For Your:	☐ Per Our Conversation
☐ Returned Your Call	☐ Information	☐ For Your Handling
☐ Will Call Again	☐ Comments	☐ Per Your Request
☐ Please Call	☐ Approval	☐ Please Return
☐ Stopped to See You	☐ Signature	☐ Read and Pass On
☐ Wants to See You	☐ File	☐ Please See Me

MESSAGE: at U. of Cal. Berkeley says thanks for sending copy of "Strengthening the Ties that Bind"

DATE: 7/21 TIME: 2:50 TAKEN BY:

FORM 7283-80

GREENFIELD COMMUNITY COLLEGE
ONE COLLEGE DRIVE
GREENFIELD, MASSACHUSETTS 01301
(413) 774-3131
Office of the Dean of Academic Affairs

July 22, 1988

Professor Joan S. Stark
2400 School of Education Building
University of Michigan
Ann Arbor, MI 48109-1259

Dear Professor Stark:

I am an academic dean at a community college who has followed the work of the Professional Preparation Network with great interest. With you, I believe general education should be merged with professional education and delivered over the full expanse of the undergraduate experience. This is especially important to community college educators because it allows us the opportunity to build programs based on student motivation to learn job-related skills and information and this is crucial to widening access as well as to improving retention rates. So let me commend you for your committee's important statement on the issue.

Do you know that the merger of general and professional education has been the focus of a major debate between the community colleges and the nation's business schools for the last several years? It is my purpose to introduce you to the current chapter of this debate and to ask you, if you believe in merging general and professional education, to support the community college position. To do this, I am enclosing some materials I presented at a COPA hearing which was held in Washington last week and a letter I later wrote to the COPA board. Since I was obliged to explain the full controversy at the hearing, my materials ought to present an adequate introduction. If they do not, I would be pleased to respond to your questions.

I hope you will find time to review this issue. If you do, I am confident that you will see your committee's exhortation to strengthen the ties that bind in a new light.

Sincerely,

Bryan K. Blanchard

Bryan K. Blanchard
Dean of Academic Affairs

BKB:lh
Enclosures

Also enclosed is a paper on general education which shows much similarity to your own conclusions.

JUL 25 1988

Princeton University PRINCETON, NEW JERSEY 08540
PRESIDENT'S ROOM

July 25, 1988

Professor Joan S. Stark
Professor Malcolm A. Lowther
School of Education
University of Michigan
Ann Arbor, Michigan 48109

Dear Joan and Malcolm:

I have just finished reading "Strengthening the Ties that Bind." It is a very stimulating and helpful document. I was especially glad that you pointed out our failure -- as faculty and as administration -- to discuss common educational goals for students. Thank you very much for sending me a copy. I plan to share it with many of my colleagues here at Princeton.

I hope all is well in Ann Arbor. We certainly miss many of our Michigan friends, but we are having an exciting time.

Best regards.

Sincerely,

Harold T. Shapiro

HTS:lc

JUL 28 1988

Lander
COLLEGE
Greenwood, South Carolina 29646

Office of the President
Telephone (803) 229-8300

AUG 8 1988

August 4, 1988

Dr. Joan S. Stark
Director
National Center for Research to
Improve Postsecondary Teaching
and Learning
School of Education Building
Suite 2400
The University of Michigan
Ann Arbor, Michigan 48109-1259

Dear Joan:

You were thoughtful to write to me after you got back to your office. Much more thoughtful than I was to awaken you at 7:15 a.m. while you were on vacation. I must confess that I was not thinking of the time difference when I dialed your number!

Our new Vice President for Academic Affairs, Richard A. Skinner, has invited Robert Armour down for our faculty fall workshop, and Dr. Armour has accepted. He is talking on, "Integrating Professional Studies and the Liberal Arts: Beginning the Dialogue."

Barbara and I have kept up with Paul and Marian and, as a matter of fact, they spent a few days with us here in Greenwood this year as they do most years in traveling to and from Florida. Paul still looks about 55.

The work that you and your husband are doing at this center is impressive. Good wishes as you continue the good work.

Sincerely,

Larry

Larry A. Jackson
President

LAJ:bd

AOTA The American Occupational Therapy Association, Inc.

August 5, 1988

Dr. Joan Stark, Director
NRIPTAL
Suite 2400
School of Education Building
The University of Michigan
Ann Arbor, MI 48109-1259

Dear Dr. Stark:

Thank you so much for sending us the complimentary copy of "Designing the Learning Plan: A Review of Research and Theory Related to College Curricula." The material being produced by NCRIPTAL is of particular interest to us at this time as we are engaged in an extensive evaluation of both education and practice in occupational therapy. We would be pleased to receive copies of:

"Focusing on Student Academic Outcomes: A Working Paper"
"Psychological Models of the Impact of College on Students"
"The Organizational Context for Teaching and Learning: A Review of the Research Literature"

Rlse send

I would also like to take this opportunity to thank you for sending us the PLUSS materials. We are especially excited about their potential use with our academic community. I have enclosed, for your information, recommendations emanating from a two-year study focusing on issues related to occupational therapy and its future in the educational and health care arenas. We are just beginning to implement some of the recommendations and the content in "Strengthening the Ties That Bind" is especially relevant at this time. *

Our first activity will be a symposium this Fall where 20-30 leaders in the profession will be examining the state of occupational therapy theory development and the environmental contexts for both education and practice. We expect that meeting to be followed by a much larger forum in February which will build on and expand the Fall discussions.

Occupational Therapy:
A Vital Link To Productive Living

1383 Piccard Drive
P.O. Box 1725

Rockville, MD 20850-4375
(301) 948-9626

[page two of letter from The American Occupational Therapy Association, Inc.]

I would like to call you the week of the 15th to see whether there is some way you might provide consultation to our projects. We are still in the early stages of development and would like to be able to take advantage of your extensive experience and expertise. I look forward to speaking with you in the near future.

Sincerely,

Stephanie Hoover

Stephanie Hoover, Ed.D., OTR, FAOTA
Associate Executive Director
Department of Professional Services

SH/al

Enclosure

University of Baltimore

Office of the Provost
1420 N. Charles Street
Baltimore, Maryland 21201-5779
(301) 625-3047

August 8, 1988

Dr. Joan S. Stark
Director, NCRIPTAL
University of Michigan
2400 School of Education
Ann Arbor, MI 48109

Dear Joan:

Thank you for a very insightful and helpful presentation at the AASCU meeting in Boston and for your generous offer to supply hard copy of your overhead graphs. Would you be good enough to send me the bar chart entitled "Preferred Content Arrangement," based on your interviews of 89 faculty? I would appreciate it.

Our Dean of Liberal Arts and I read Strengthening the Ties That Bind before I left for Boston. We are especially interested in the project, since we inaugurated in 1986 an upper-division interdisciplinary core for all business and liberal arts students. The courses are team-planned and, in some instances, team-taught by faculty from both divisions. (We've received substantive grants from NEH, FIPSE, and two local foundations to implement the program.) If you would be interested in more details, I'd be happy to send you more information.

I look forward to hearing from you.

Sincerely,

Catherine R. Gira

Catherine R. Gira
Provost

CRG/mel

La Roche College

9000 Babcock Boulevard
Pittsburgh, PA 15237
(412) 367-9300

August 10, 1988

Ms. Joan S. Stark
Professor and Director
National Center for Research to Improve
Postsecondary Teaching and Learning
Suite 2400
The University of Michigan
Ann Arbor, MI 48109-1259

Dear Joan:

I just received your brochure "Foundations For Research from NCRIPTAL." I am looking forward to the results of your course planning survey.

Of even greater interest to me is the copy of your work on liberal and professional education. La Roche has been working on integrating the two for some time. At this point, we have identified what we believe to be the significant aspects or values of each. We are still working on the practical aspects of demonstrating how we accomplish these in each major across the college. I think your work will provide us the additional direction we need.

I am enclosing a brief paragraph on our understanding of liberal and professional education which might interest you.

Hope all is going well with you--it must be, given the fine work you are producing!

Yours sincerely,

Mary C. Stuart, Ph.D.
Executive Vice President

enclosure

AUG 15 1988

Our Lady of the Lake University of San Antonio

August 24, 1988

Ms. Mary Joscelyn
Professional Preparation Project
2400 School of Education
The University of Michigan
Ann Arbor, MI 48109-1259

Dear Ms. Joscelyn:

Thank you for Strengthening the Ties that Bind. I would like to schedule a faculty development conference for next Spring for my faculty on the subject of integrating liberal and professional study. Your report is both timely and important, and I would like to ask the Network's assistance.

1. Since off-campus experts have far more credibility than local sages, could you recommend a consultant-presenter on the subject that we might bring to campus? Ideally, because travel money is always tight, the person would be located in Texas or the Southwest, but quality is more important than location.

Is it ready yet? →

2. The report (p. 65) mentions a list of related projects. If the list is available, I would appreciate receiving a copy.

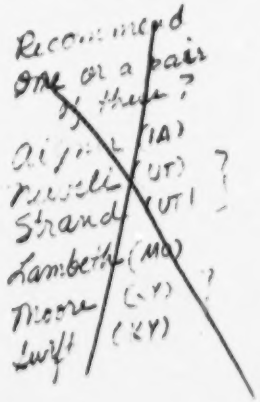
Thank you for your help, and for an excellent report.

Sincerely,

Howard Benoist

Howard Benoist
Vice President and Dean
of Academic Affairs

HB:ed



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San Antonio, Texas 78285
(512) 434-6711

The State University
in Northern Virginia

4400 University Drive
Fairfax, Virginia 22030

Office of the Director
University Libraries
(703) 323-2616

George Mason University

September 2, 1988

SEP 12 1988

Dr. Joan Stark, Program Director
National Center for Research to Improve
Postsecondary Teaching & Learning
2400 School of Education
University of Michigan
Ann Arbor, MI 48109

Dear Joan,

I'm just catching up with your work on integrating undergraduate liberal and professional study. Can you send me a copy of your publication? If not, I'll have George Mason order me one.

I thought you might like to see the enclosed items which give some of my own thinking about that topic.

I hope NCRIPTAL is going well. I am enjoying my relocation here at George Mason. Give my regards to Malcolm and to the rest of the crew.

Cordially,

Arthur W. Chickering
Professor

AWC/yk

Enc.

CSM
Colorado School of Mines
Golden, Colorado 80401
303/273-3990/3991

The Guy T. McBride, Jr.
Honors Program in
Public Affairs for Engineers

September 12, 1988

Professor Joan S. Stark
Department of Education
University of Michigan
Ann Arbor, MI 48109

Dear Professor Stark:

In view of your recent study on liberal arts and professional education, I thought you might be interested to hear about our program at the Colorado School of Mines. The McBride Program has implemented several of your major recommendations.

The enclosed program newsletter and brochure will give you a broad picture of the program. The brochure is being revised to show some major changes we initiated this year.

I do not know whether you plan to attend the meeting of the Association of American Colleges in Baltimore next week. If you do, I hope to meet you there and share with you some of our experiences.

Yours Sincerely,

Thomas Philipose
Principal Tutor

TP:am
Enclosures 2

SEP [illegible] 1988

September 13, 1988

Dr. Michael Morris
Academic Dean
University of New England
Hills Beach Road
Biddeford, Main 04005-9599

Dear Dr. Morris:

The materials you sent describing the extensive curricular deliberation that the University of New England has undertaken are interesting. Unfortunately, my time is completely booked during the week of October 19-26 and, in fact, I am not accepting any more speaking engagements at least through April, 1989.

Several of the members of the Professional Preparation Network, responsible for "Strengthening the Ties That Bind," have indicated they would be willing to assist other campuses in a general way to move toward the goals espoused in that report. I suspect, though, that it may not be possible to provide help specifically directed toward physical and occupational therapy or nursing, as indicated in your letter.

For a general consultation, I suggest Dr. James Winship, Director, Teaching Enhancement Center, University of Wisconsin-Whitewater. If you really need specific help in the area of the health sciences, Dr. Mary Lou Peck of the Nursing Department at Russell Sage College is not far away. While I would recommend her highly, I am not sure that she is available for this type of consultation. To let you know in advance, I would assume these individuals might be willing to consult with your faculty for $400-$500 per day plus travel expenses.

We will keep you on the mailing list and have made note of your interest if NCRIPTAL decides to sponsor another seminar next summer like Smoky Moutain.

Sincerely,

Joan S. Stark
Professor and Director

JSS:lcs

cc: Patricia Green, Assistant Director, NCRIPTAL
Mary Lou Peck
James Winship

mount saint mary college

330 Powell Avenue • Newburgh, NY 12550 • (914) 561-0800

September 26, 1988

Malcolm A. Lowther
The University of Michigan
2117 School of Education Building
Ann Arbor, Michigan 48109

Dear Malcolm:

I would like to congratulate you and Joan S. Stark for an excellent presentation in Strengthening the Ties That Bind: Integrating Undergraduate Liberal And Professional Study.

Perhaps you may remember me, I attended the University of Michigan in 1975 under the Institute for Administrative Advancement, and you were my advisor.

In any case, I would like to once again congratulate you and your co-director for an excellent presentation, as well as telling you that I feel your views on these subjects were right on target.

Sincerely,

Loretta Butler

Dr. Loretta Butler
Coordinator of Curriculum Development

DLB:ss